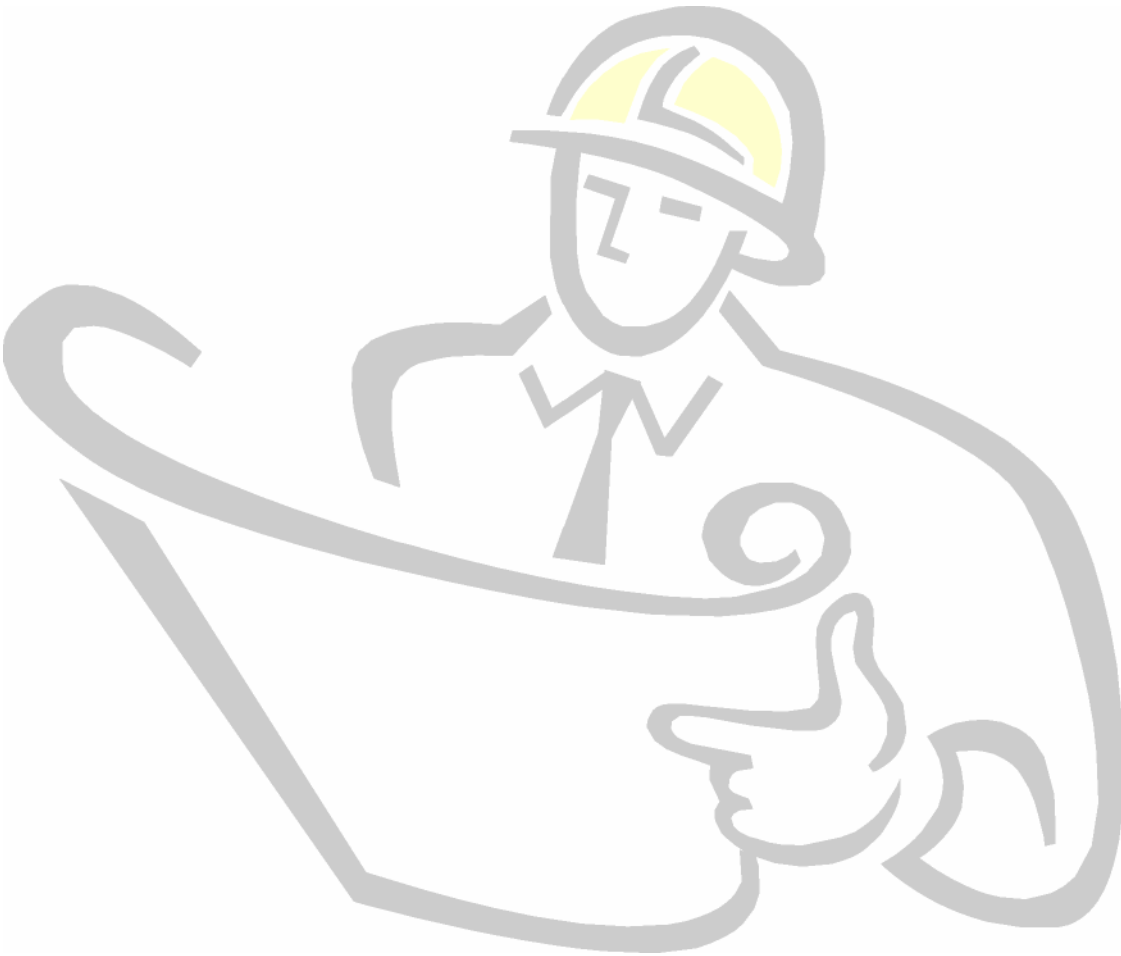


GLA Construction Safety Requirements



This document is intended for all Contractors performing work at Veterans Affairs Greater Los Angeles Healthcare System Hospital or at any of its affiliates, and supplements any requirements in the specifications. Contractor is required to comply with all OSHA and other VA and industry standard safety requirements.

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SECTION I

Contractor Safety

I. PURPOSE

Contractors working at VA Greater Los Angeles Healthcare System (VHGLAHS) or its affiliates have a responsibility to perform their work so fire, accident and injury potential is minimal, and all construction activities are carried out under the governing laws and regulations, and special GLA requirements to provide protection for employees, patients, visitors and property.

II. GENERAL REQUIREMENTS

- A. The use of radios or other sound producing equipment is not allowed on any construction project.
- B. Type II Hard Hats are mandatory on all construction projects.
- C. Foot Protection:
 - 1. Steel Toe Safety shoes are recommended.
 - 2. Open toe shoes, sandals, or sneakers are prohibited.
- E. Unsafe equipment MUST be removed from service until it is repaired or replaced. (Ladders, tools, staging, etc.)
- F. Smoking is prohibited within all buildings and only allowed in designated outside areas.
- G. Lockout/Tagout/Tryout of electrical, mechanical, gases or liquids stored under pressure and valves is mandatory while performing any work on any of these systems. All contractor personnel involved must be trained.
- H. Prior to entering a confined space (tanks, manholes, below grade pits, etc.), the Contractor must evaluate the space for hazard based on their own written procedures, but in no case less than OSHA, 29 CFR 1910.146. It is up to the contractor to do atmospheric and other testing using their own equipment and personnel. The Contractor's procedures shall address rescue issues independently. All contractor personnel involved with a confined space entry must have appropriate training

and have evidence of that training available with entry is made.

I. The possession of alcoholic beverages, illegal drugs, explosives and/or firearms is strictly prohibited on VAGLAHS property. Anyone suspected of being under the influence of alcohol or drugs will not be allowed to enter or remain on Hospital property. Cameras and video tape recorders are also prohibited.

J. Hazardous and Regulated Wastes:

Waste materials are not to be poured into sinks, drains, toilets, storm sewers or on the ground. Solid or liquid wastes that are hazardous or regulated are not to be disposed of in refuse dumpsters. All spent or unused chemicals must be disposed of from the work site in accordance with all Federal, State, and Local statutes and regulations. Waste materials generated on site shall be placed in labeled DOT approved containers, supplied by the Contractor. Contractors must have pre-approval from the COR for any on site processes that will generate a hazardous waste, result in a waste discharge of any kind or result in air emissions. Internal combustion engines inside of buildings are prohibited. Contractors must maintain their equipment to minimize the potential of discharges (oil/coolants/gasoline, etc.) to the environment. All leaking equipment shall be repaired or removed from the site. All spills must be reported by calling the Occupational Safety and Health Office at telephone number 310-268-3563.

V. REGULATIONS FOR CONTRACTORS

- A. Working under the influence of intoxicants or narcotics is not permitted.
- B. No Contractors may have contraband materials such as firearms, dangerous weapons, fireworks, intoxicants or narcotics on the premises.
- C. Horseplay, scuffling, fighting, etc., are prohibited on GLAHS property.
- D. Running in hospital premises is prohibited.
- E. Aisles and emergency exits must be kept clear of material and equipment at all times. Emergency exit doors must be kept clean and closed at all times.
- F. Tools and equipment must not be thrown from one employee to another or dropped from one level to another. The transfer of all tools and equipment will be from hand to hand, or by use of a suitable rope and tool bucket.
- G. Contractor employees must immediately report to their supervisor all hazards and unsafe conditions and all accidents they are involved in at the time of occurrence, who will then contact the Construction Project Manager or Facilities Project Manager.
- H. Contractors shall provide appropriate warnings signs, ropes and barricades to warn patients, visitors and employees of any work operation.

- I. Contractors must provide the GLAHS with a schedule and minutes of all safety meetings.
- J. Contractors shall abide by all VA, NFPA and Federal OSHA regulations.

VI. HOUSEKEEPING

- A. Contractors are to consult with COR before bringing any construction materials on the site, so that appropriate storage/lay down areas can be assigned, which will not interfere with Hospital operations. Materials are to be placed in an orderly manner, so as not to cause a fire, tripping or pest harborage hazard.
- B. Contractors shall remove their tools, supplies, etc., to their proper storage areas when the day's work ends, depending on space availability.
- C. Contractors shall clean all scrap materials from the work floor each day. A container(s) must be provided by the Contractors to discard metal, wire, wood, etc., and be removed from the work area at the end of each workday.
- D. Contractors shall disconnect all electrical cords from electrical outlets when not in use, and at the end of each workday. Cords shall be coiled and stored properly when not in use. Cords MUST be U.L. listed.
- E. Lunch wrappings, coffee containers, packaging wrappings and other refuse must be placed in waste containers and not left on the work floors or equipment. Such containers must be removed from the work site at the end of each workday.
- F. All shoes and cart wheels shall be cleaned prior to leaving the construction site.
- G. Sticky Mats as required by Infection control shall be changed as when loaded with dirt.

IV. POWERED VEHICLES

- A. The maximum speed limit for vehicles is twenty miles per hour on facility grounds.
- B. Construction parking will be assigned by the Facility Project Manager. Contractor to provide suggested locations for approval.
- C. Abide by all posted road signs.

V. HAND TOOLS

- A. Use only those tools in good condition and only for the purpose for which they are designed.
- B. Ground wires on portable tools must not be disconnected or broken. They must be reconnected or replaced, when necessary, by a person qualified in electrical work

before being placed into operation.

- C. Before using an extension cord or trouble light, check for breaks in the insulation, missing ground pin, faulty plugs or sockets and report all defects to the Contractor Supervisor. Under no circumstances will a spliced or patched cord be allowed.

VI. EXPLOSIVE-ACTUATED FASTENING TOOLS

- A. An operator license must be provided for each person using an explosive-actuated tool, and must be available for review by VAGLAHS Representative.

VII. WELDING OR BURNING PROCEDURES

- A. No welding or any other hot work may be carried out without a Hot Works Permit. See section VI for more info.
 - 1. Combustibles must be removed in a radius of at least 20 feet away from the job site or be covered with flameproof covers or guards or made safe by other approved means.
 - 2. The Occupational Safety and Health Office may review the preparations for safe work, the work-in-progress, or any completed repair or modifications on premises. If the preparations are incomplete or inadequate, the deficiencies must be resolved before work commences. If work-in-progress is being done unsafely, the responsible Trade Contractor Supervisor will be notified, and all deficiencies must be corrected before work is continued. If completed work has safety deficiencies, the Trade Contractor Supervisor will be notified to resolve the matters.
 - a. All torches, welders, grinders, and similar equipment must be inspected prior to being used.
 - b. When performing hot work in a shaft, the welder must ensure the shaft is free of combustibles and provide both a fire barrier one floor below the work and have a dedicated fire watch.
 - c. All combustibles must be relocated at least 20 feet away from any hot work process.
 - d. Floor and wall openings within 20 feet must be covered.
 - e. All areas will be monitored by the welder for accidental ignition for a period of 30 minutes after the hot work has been completed.
- B. A 10lb ABC fire extinguisher must be present at all times, provided by the Sub-

- Contractor. All extinguishers shall have a California State Fire Marshall tag on them
- C. Never use combustible materials to support the object being welded.
 - D. Protect all parts of the body from drippings and slag especially when welding overhead.
 - E. All clothing must be free of grease and oil while welding or cutting.
 - F. For protection of employees in the work areas, screens must be in position when welding is being performed.
 - G. Proper eye protection must be worn when chipping slag from the weld. Welding helmets with proper shade number must be worn when performing any electric arc welding.
 - H. All employees within the protective curtain around the welding locations must wear approved eye protection.
 - I. Appropriate goggles or helmets with proper shade number colored lenses must always be worn when gas welding or cutting.
 - J. Welding blankets, covers and curtains must be used at all times whenever exposures warrant their use. The area around any operation will be cleared of dust or lint to exceed the possible range of sparks by three (3) feet. When work cannot be moved practically, the work area will be made fire-safe by removing or covering combustibles within range of any possible sparks.
 - K. Never weld, cut, braze, solder, or otherwise heat an empty container that previously contained flammable or explosive substances unless all such substances and their latent fumes have been completely removed.
 - L. Any closed container must be vented to the atmosphere to prevent explosion by expansion of the entrapped air.
 - M. Adequate ventilation must be provided while welding in confined spaces or while brazing, cutting, or welding zinc, brass, bronze, galvanized or leaded material.
 - N. All materials should be cooled or plainly marked "HOT" after the job is completed.
 - O. The absence of a particular safety rule on welding or other "hot work" in this section does not preclude the application of commonly accepted safe practices. When in doubt, refer to the safety precautions stated in OSHA Standards 1926.350 to 1926.354 and Subpart O of OSHA's General Industry Standards 1910.251-1910.245 or NFPA 51B and ANSI Z49.1
 - P. Cylinder valves must be closed at all times and the hose bled when the torch is not in use.
 - Q. All gas cylinders in the work areas must be secured in an upright position, with valve

covers in place.

- R. Stored fuel gas cylinders must be separated from oxygen cylinders by at least 20 feet or by an effective firewall at least five feet high.
- S. Empty cylinders should be marked empty, segregated from full cylinders, and promptly returned to the supplier with the protection caps in place and valves closed.
- T. Do not use oil or grease on cylinders or regulator connections.
- U. When gas cylinders are being transported, they must be securely latched in an upright position with valve cover in place.
- V. A hammer or cheater bar shall not be used to open or close cylinder valves. If valves cannot be opened by hand, the supplier must be notified. Where a special wrench is required, it shall be left in position on the stem of the valve while the cylinder is in use so that the fuel gas flow can be quickly turned off in an emergency.
- W. Avoid contact with wet surfaces, ground wires or metal objects when changing electrodes.
- X. All portable electric welding units must have frame ground wires connected to the ground before the machine is operated.
- Y. When welding is done in hazardous areas, current carrying ground wires should be attached to the piece of metal being welded.
- Z. The Trade Contractor's Supervisor must inspect items to be welded to determine that all conditions and safeguards have been completed. An employee must stand by as a fire watch at all times during burning or welding operations and for 30 minutes after, unless relieved by the supervisor in charge, but in no case less than 10 minutes after repairs are made. Fire watch must be provided by the Trade Contractor.
 - 1. No burning or welding is permitted in the presence of flammable vapors, liquids or ignitable dusts.
 - 2. No burning or welding is permitted while sprinklers are out of service, unless other adequate precautions are taken.

SECTION II

Environmental Health & Safety

1. HAZARDOUS WASTE DISPOSAL

- A. VAGLAHS operations meet all Federal, State, and Local Environmental Health and Safety regulations. Contractors must also abide by all such rules. VAGLAHS recycles office paper, cardboard, and other items. **Do not mix these items with trash or hazardous waste.**
- B. Report all spills. It's the LAW.
- C. Maintain your equipment and vehicles. Leaking items or poorly maintained items must be promptly removed from the facility at the Contractor's expense. Know which materials are hazardous. **Do not mix hazardous waste with trash.**
- D. Do not leave containers outside where they can leak, be knocked over, or be exposed to adverse weather conditions.
- E. Chemical Incident Response Policy
 - 1. The following procedures shall be implemented for any occurrence which results in the uncontrolled release of and exposure to an unknown or hazardous chemical.
 - 2. Any person in the immediate area or room should evacuate and alert others to do the same. During evacuation all doors, including fire doors, should be closed.
 - 3. Notify Safety by dialing X6966 (WLA), Safety Chief at 310-261-4200 or Environmental Engineer at 323-491-0887. For Sepulveda and LAACC call the Safety Chief or Environmental Engineer.

Provide, if possible:

- a. Specific location
- b. Type and amount of chemical involved.
- c. Your name and location

2. AIRBORNE CONTAMINANTS CONTROL

This section includes control policy and procedures and ceiling access control of airborne contaminants.

A What are hospital airborne contaminants.

- i Aspergillosis and related nosocomial fungal infections are caused through inhalation by immuno-compromised patients of aspergillus spores, or to the related spores which can be present in the construction environment. The spores are known to be prolifically present in construction dust, debris and earthwork excavation dust. Control of construction dust, debris and excavation dust, as required in this Section, is imperative to help prevent outbreaks of aspergillosis or related nosocomial fungal infections in immuno-compromised patients.
- ii. Inhalation of aspergillus spores or other related fungal spores by immuno-compromised patients can lead to serious complications and death.
- iii. Aspergillus and other related spores are present in the natural environment and thus are not a risk to healthy construction workers.
- iv. Construction workers are required to attend an orientation session.

B. Some Contaminate Producing Activities

1. Demolition and removal of walls, floors, ceilings, and other finish materials.
2. Demolition of plumbing, mechanical and electrical systems and equipment.
3. Finish operations such as sanding, painting, and application of special surface coatings.
4. All routine construction activity which can generate dust or disturbs existing dust
5. Site work operations.

C. Contaminate control measures

Contractor shall limit dissemination of airborne contaminants produced by construction-related activities, in order to provide protection of immuno-compromised and other patients, staff, diagnostic operations, or sensitive procedures or equipment, from possible undesirable effects of exposure to such contaminants.

- a. Dust in ceilings and construction debris contains fungus spores. Construction activities causing disturbance of existing dust, or

creating new dust, or other airborne contaminants, must be conducted in tight enclosures cutting off any flow of particles into patient areas.

- b. Ceilings and walls in Protection areas and other areas of the hospitals as indicated on drawings must be secure at all times. If access into the ceilings in occupied areas is required, procedures as described in this Section shall be followed.

3. PROTECTION FROM ABOVE-CEILING WORK

1. If work is being done in the interstitial above patient care and if work must be performed while the space below is occupied provide temporary work surfaces to provide a safe working platform and netting to protect the ceiling and the spaces below from falling objects and materials. Take all necessary precautions to protect the people and space below from injury due to the Contractor's operations.
2. Exercise caution when handling fluids, particularly in the interstitial space. When working with fluids provide a watertight barrier beneath the work area to catch and retain all spillage before it reaches the ceiling below.
3. Notify the Safety Office in Bldg. 218, Rm 310 and Project Engineers at least 24 hours, or greater if requested by the VA, prior to commencing work in ceilings or interstitial spaces above occupied areas to allow at-risk patients to be relocated or protected.
4. Obtain an Interstitial Permit from the Safety Office prior to any work in the interstitial.
5. If working above the ceiling from the floor an "Above Ceiling Work Permit" must be obtained from the Safety Office.

4. ACM ABATEMENT

- a) **Contractor to follow OSHA requirements and project specification at every stage..**
- b) **Contractor to notify the dates of ACM abatement at least two weeks in advance to VA's COR. VA's safety office provides the required oversight including verification of the abatement company's credentials and procedures.**

SECTION III

Life Safety

I GENERAL

- A. All exits must be maintained in width during construction.
- B. All fire lanes are to be free from vehicles and dumpsters at all times.
- C. All life safety systems must remain fully operational; alternate means must be approved by the Facilities Project Manager and Safety Office.
- D. Any temporary detection, or alarm systems must be installed to the requirements of the Life Safety Code. All such temporary systems shall be installed with the wiring placed in EMT.
- E. All smoke detectors shall be “bagged”, using zip lock bags. The bottom of the bag will be cut open, and taped in place over the detector base. The zip-lock shall be closed during the hours of construction, and opened at the end of each day to provide protection of the unoccupied area during non-construction hours.
- F. All construction barrier shall have adequate signage to discourage casual observers or intruders. Maintaining the fire rating of the barriers is the responsibility of the General Contractor. Construction site entrance doors shall be ¾ hour rated and have door closers installed. For construction lasting 7 days or less the contractor may use fire retardant sheet plastic dust barriers.
- G. Job site fire extinguishers shall be provided by the Contractor and located per OSHA 1926.150. Additional extinguishers may be recommended by the Facilities Project Manager and or the Safety Office. All extinguishers shall be mounted and kept off floors. Monthly inspection is the responsibility of the Contractor. The tag shall be dated and initialed monthly.
- H. The Facilities Project Manager, Infection Control Officer, Director of Facilities and Director of Safety can conduct daily inspections of the construction site(s).
- I. If the safety of adjacent areas is compromised due to construction, staff will be informed and alternate exit routes shall be identified, and marked, after approval from the Hospital. All such measures must be discussed at NTP, prior to commencement of construction work with the COR.
- J. All exits, temporary or permanent, must be marked and lighted during construction, in accordance with the Life Safety Code.

II FIRE WATCH

It is the policy of the VA Greater Los Angeles Healthcare System (GLA) to ensure the safety of all its patients, visitors, and staff in the event of fire protection system shutdown, repairs or renovations of fire protection equipment.

1. PROCEDURES:

A. Implementation:

- (1) In the event that the fire alarm system or sprinkler system must be shut down during construction the fire watch will be maintained by the contractor.
- (2) Upon notification of a system outage that is anticipated to last more than four hours in a 24 hour period, Occupational Safety and Health Office (OSH) will initiate the following fire watch procedures:
 - (a) OSH will contact Los Angeles City Fire Department to alert them to the condition.
 - i. The business telephone numbers for each location are as follows:
 - WLA, LAFD Station #37 – (310) 575-8537
 - Sepulveda, LAFD Station #87 – (818) 576-8687
 - LAACC, LAFD Station #4 – (213) 458-6204
 - ii. At completion of Fire Watch, notify WLA Safety Office.
 - (b) Building occupant/Contractor will be the primary individuals conducting the fire watch during normal business hours (8:00am to 4:30pm).
 - (c) VA Policy will be notified of the condition and will continue the fire watch (after hours) from 4:30pm to 8:00am.
 - (d) During the patrol of the area, the fire watch should not only be looking for fire, but make sure that the other fire protection features of the building such as egress routes and any other fire protection systems are available and functioning properly.
 - (e) Fire watch inspection tour will be performed every hour throughout the affected areas.
 - (f) Attached “Fire Watch Inspection” form will be returned to the Safety Office at the completion of the watch.

B. Closeout

- (1) Fire Safety will determine the need to extend the fire watch into the next shift and will make appropriate arrangements with Contractor, Engineering or VA Police as needed.
- (2) During routine construction and maintenance system outages, every effort will be made to accomplish work within the operational shift period so that the need for fire watch won't exceed an 8 hour period, re-enabling the system(s) for the off-shift.

(3) When the system is restored to normal operation, Fire and Safety will close out the system impairment and confirm that the fire watch activities may be discontinued.

III. FIRE PROCEDURES IN CASE OF FIRE

A. The location of the manual pull stations can be found at all exits. In any case, the contractors should familiarize themselves with fire alarm pull stations and fire extinguisher locations where they are working.

B. The following Fire Procedures shall be followed:

1. **VA West Los Angeles** Procedures for Reporting Fires

- a. By activating the nearest manual alarm pull station.
- b. Dial Fire number '**12**' and report the incident to the VA Telephone Operator. Give your name, exact location of the fire and explain if possible what is burning.
- a. False alarms shall be reported by notifying the Fire and Safety Office either by telephone at 310-268-3563.
- b. It is important to report **all** fires (no matter how small or large) to the Fire and Safety Office at Extension 310-268-3563.
- c. VA Police Emergency Number is Extension 4036.
- d. All other Emergencies Phone Number is Extension 4036.

2. **VA Sepulveda Campus** Procedures for Reporting Fires

- a. By activating the nearest manual alarm pull station.
- b. Dial Fire number '**3**' and report the incident to the VA Telephone Operator. Give your name, exact location of the fire and explain if possible what is burning.
- c. For after hours and weekend reporting, call 8-911 and report the incident to Los Angeles Emergency Dispatcher. Give your name, exact location of the fire and explain if possible what is burning.
- d. False alarms shall be reported by notifying the Fire and Safety Office either by telephone at 310-268-3563 or by Group Page through VA Telephone Operators WLA.

e. It is important to report **all** fires (no matter how small or large) to the Fire and Safety Office at

310-268-3563.

f. VA Police Emergency Number is Extension 9300.

g. All other Emergencies Phone Number is Extension 9300.

3. VA Los Angeles Ambulatory Care Center Procedures for Reporting Fires

a. By activating the nearest manual alarm pull station.

b. Dial Fire number '**2222**' and report the incident to the VA Telephone Operator. Give your name, exact location of the fire and explain if possible what is burning.

c. For after hours and weekend reporting, call 911 and report the incident to Los Angeles Emergency Dispatcher. Give your name, exact location of the fire and explain if possible what is burning.

d. False alarms shall be reported by notifying the Fire and Safety Office either by telephone at 310-268-3563 or by Group Page through WLA VA Telephone Operators.

e. It is important to report **all** fires (no matter how small or large) to the Fire and Safety Office at Extension 310-268-3563.

f. VA Police Emergency Number is Extension 4036.

e. All other Emergencies Phone Number is Extension 4036.

SECTION IV

Security

- A. All contractors are to wear their Hospital issued identification (I.D.) badges at all times.
- B. The I.D. Badges will be issued in Bldg. 218, Rm. 1 by Human Resources through the Engineering sponsor during normal business hours.
- C. Contractor to obtain identification decal from VA police in building 236 for all the vehicles that will be using VA parking lots during construction. Under no conditions the contractor or any of his workers may use parking reserved for patients.
- D. Any crane or similar lifting operation is to be performed in accordance with OSHA 1926.550 to 1926.556 and reviewed with Hospital Safety Office prior to start. Crane permits shall be obtained through the Safety Office in Bldg. 218, Rm. 310.
- E. Any impediment/blockage to vehicular or pedestrian traffic is to be reviewed with the Facilities Project Manager prior to the start of the procedure and shall have VA Police approval prior to that impediment/blockage.
- F. Any theft or other infraction should be immediately reported to VA Police at:
 - West LA: 310-268-4524.
 - Sepulveda: Ext. 9300
 - LAACC: Ext. 4036
- G. All deliveries shall be made during normal business hours through the Bldg. 500 Loading Dock.
- H. Construction site must be secured at all times. All doors for access to construction site, whether temporary doors or existing doors, must be kept locked at all times. They need to be accessible by VA COR and VA Facilities at all times. Contractor shall notify VA COR at least 5 days in advance to obtain cores for door locks. VA standard door locks are 7 pin, small format, interchangeable core Schlage/ Allegion. When notified by the COR, contractor shall take the lock(s) to the lock shop in building 63 and have them fitted with new construction site cores. The keys (W610) shall be obtained from the COR. Contractor to replace the cores with the new cores per project drawings only after the construction is complete.

SECTION V

Permits and Requirements

- a. Interim Life Safety Measures (ILSM)
- b. Infection Control Risk Assessment (ICRA)
- c. Hot Works Permit
- d. Working Safely in Interstitial Spaces
- e. Above Ceiling Work Permit
- f. Lockout/Tagout/Tryout Permit
- g. Mobile Crane Permit
- h. Excavation Permit

REFERENCE:

- A. JCAHO Environment of Care Standards (2004)
- B. OSHA Standards for General Industry
- C. National Fire Protection Association (NFPA) Codes and Standards
- D. American National Standards Institute (ANSI)
- E. Underwriters Laboratories (UL)
- F. American Society for Testing and Materials (ASTM)
- G. American Society of Healthcare Engineering (ASHE)
- H. American Society of Safety Engineers (ASSE)
- I. National Safety Council (NSC)

a. INTERIM LIFE SAFETY MEASURES (ILSM)

A. The Interim Life Safety Measure are required for protection during construction if one or more of the following conditions are met :

1. The function of a fixed fire protection system is interrupted for more than one shift.
2. Obstruction to a required exit component.
3. The construction is not completed in one shift.
4. The construction is not limited to one room at a time.

B. ILSM Requirements:

(1) Ensure exits provide free and unobstructed egress. Hospital employees affected by any change in egress during construction shall receive training if alternative exits must be designed.

(2) Ensure free and unobstructed access to emergency department and for emergency forces.

(3) Ensure fire alarm, detection, and suppression systems are not impaired. A temporary, but equivalent, system shall be provided when any fire system is impaired. Temporary systems must be inspected and tested monthly.

(4) Ensure temporary construction partitions are smoked tight and built of noncombustible materials.

(5) Provide additional firefighting equipment and use training for employees within affected area.

(6) Smoking shall not be permitted in or adjacent to all construction areas within the healthcare system.

(7) All storage areas that are sprinklered shall be kept 18" inches below the sprinkler head. There will be no storage of any type in halls, passageways, or walkways.

(8) All empty boxes, trash, and waste will be properly disposed of in approved waste storage bins provided by Environmental Management Department. All work areas shall be kept clean and free of debris and unnecessary flammable materials at all times.

(9) Additional fire drills will be conducted in the areas affected by ILSMs until the ILSMs are rescinded.

(10) Increase hazard surveillance in the area affected by ILSMs until the ILSMs are rescinded.

(11) Training will be provided to all employees in the area affected by ILSMs to ensure that these employees understand the ILSMs and that the new fire/emergency procedures that have been implemented.

C. It is the responsibility of the General Contractor to:

- a. Ensure that the work site is compliant with all requirements.
- b. Obtain ILSM permit prior to start of construction and post it at entrance to construction site
- c. Report any condition relevant to ILSM to the COR or Safety Office.
- d. Review ILSM all the construction workers during project meetings.

D. ILSMs apply to all personnel, including construction workers.

E. Implementation of ILSMs will begin when construction on any scale begins.

F. Each ILSM implementation and completion will be documented in the Executive Safety Committee Meetings.

G. Frequency of inspection, testing, training, monitoring, and evaluation will be established by the Safety Officer.

b. INFECTION CONTROL RISK ASSESSMENT PERMIT

ICRA permit must be obtained by the contractor from ICRA specialist (B500, 6th floor, room 6404) and displayed at construction site at all times. Prior to start of any construction activity contractor must request inspection of construction site by ICRA specialist and obtain approval . See spec section 01 35 26 SAFETY Requirements (also available at <https://www.cfm.va.gov/TIL/spec.asp#01>) for further requirements.

c. HOT WORK PERMIT REQUIREMENTS

1. When Required

Hot Work operations include cutting, welding, brazing, soldering, thawing pipe, grinding, or other spark or flame producing operation. Any process that involves an open flame used temporarily for repair or temporary heating is considered a hot work operation. The use of a portable engine for temporary power is also considered a hot work operation. Hot Works permit is required during construction, alteration, demolition operations or making repairs while performing hot work, such as cutting, welding, thermal welding, brazing, soldering, grinding, thermal spraying, thawing pipe or any other similar work.

2. A Hot Work permit must be obtained from the Safety Office (Bldg. 218, Room 310) prior to any welding or burning in any area of the Facility. All Hot Work Permits shall be returned to the Safety Office at the completion of the hot work fire watch.
3. Cutting, welding and other hot work shall not be permitted in the areas not permitted by Occupational Health and Safety Officer:
4. Upon issuance of a hot work permit, the permit must be kept on the site of the hot work procedure, and be made available to the VA Medical Center Auditing Official upon request. At the end of the hot work procedure, the permit should be returned to the authorizing official (Occupational Health and Safety Department).
5. The Safety Officer, Safety and/or Fire Inspector and Engineering Service Section Chiefs shall have the authority to stop cutting, welding and other hot work operations that are being accomplished without a permit and those operations that do not meet the standards set forth in National Fire Protection Association Standard (NFPA) 51B.
6. Upon completion of any operation, an inspection will be made for hot materials by the fire watch individual before securing the area. Occupants in the area will be informed that the operation is complete and the area is safe.
7. The fire watch will be designated and present with an approved fire extinguisher for the duration of the operation and for thirty (30) minutes after the operation is complete. See section III for more info on FIRE WATCH.

d. PERMIT FOR WORKING IN INTERSTITIAL SPACES

Each person working in the interstitial spaces will observe rules so as to reduce or eliminate the possibility of people and/or equipment from falling through ceiling tiles into spaces below from above and to ensure no accidents occur while working in these spaces. Contractors working at the GLAHS are responsible to train their employees as well as subcontractor employees to ensure that the requirements are followed.

1. PROCEDURES:

A. All work in the interstitial space will be performed on the catwalk or a permanent standing structure, such as a ladder located in the corridor/room below, working platform or scaffolding firmly in place prior to work. Work is defined as any activity using hand tools that will require 1/2 hour or more to complete.

B. The design and construction of the working platform, netting or scaffolding must be approved by both the Fire and Safety Office and the Project Engineer/COR prior to use. If platform/netting is used it must be large enough to cover the entire area of work and must be properly secured in place.

C. Contractors will provide date, time, interstitial and floor location to Safety and COR 3 days prior to start of work. Interstitial Permits must be obtained from Fire and Safety Office prior to any work being done.

D. COR and Contractor will notify nurse managers and supervisors of the work being done above their area at least 24 hours before start of work, or in exceptional cases as soon as possible *prior* to the start of work.

E. All personnel working in the interstitial will wear ALL proper Personal Protective Equipment (PPE). Hard Hats shall be worn at all times. Only head protection complying with OSHA standard 1926.100 will be recognized as proper PPE. Since bump caps are not designed to specifications contained in the American National Standards Institute (ANSI) Z89.2-1971 standard, the use of bump caps as PPE is unauthorized at GLAHS.

F. The Safety Office will attend the initial pre-construction meeting and conduct the safety briefing, including general fire safety, construction and interstitial work policies and procedures, security, housekeeping, and smoking policies, for all outside contractors planning to work in the GLAHS. The Project Engineer or COR will coordinate with the Safety Office and all parties involved for a time and location to conduct this briefing.

G. The General Contractor will conduct daily safety briefings with all personnel to include day laborers, and subcontractors, and will document the daily safety briefings as well as recording personnel in attendance. Project Engineer or COR will review the documentation. These will be spot checked by the Safety Office. The General Contractor will be responsible for having this done by all subcontractors in a like manner.

H. It is the responsibility of the General Contractor to ensure all safety equipment and all hand tools, power tools, etc. are in good safe operation. The General Contractor will also ensure the same for all of his employees.

I. All work personnel and employees will use common sense and professional workmanship while in the interstitial.

J. All construction helpers, apprentices, and laborers will be under direct supervision of a journeyman while working in the interstitial. Non-authorized personnel (family, friends, etc.) are prohibited from entry into the interstitial.

K. There will be NO EATING, DRINKING, SMOKING, and/or CHEWING while working in interstitial spaces. Violation of any of this will result in being asked to immediately leave the premises. Employees who violate this will NOT be permitted to return.

L. The Project Engineer and or COR will conduct a daily safety walk-through inspection of all interstitial spaces where work is being performed. The weekly construction inspection of the construction areas will be done by the Construction Safety Officer.

M. All personnel doing business in the interstitial will practice the buddy system to the greatest extent possible and must be accompanied by another person or within radio contact with another person.

N. Metal containers will not be used to hold tools. Plastic containers or red bags should be used. All heavy tools used in the interstitial space will be secured by tie off ropes. Any tanks, such as acetylene, will be used only when a net is present.

O. VA Supervisors and Safety Office Personnel will document non-compliance of safety procedures in the interstitial. Administrative action may be taken for repeat offenders.

P. All ladders, roll ladders, and scaffolds must be in good operation, and must be checked prior to use. If a ladder, roll ladder or scaffolds are found to be unsafe by the Safety Office it cannot be used by the order of the GLAHS Safety Manager or their alternate.

Q. The General Contractor is responsible to ensure all of his workers are wearing ID badge.

R. All interstitial safety related hazards and issues not noted in this policy will be reviewed by the STVHCS Safety Manager or their alternate for recommendation.

e. ABOVE CEILING PERMIT

PURPOSE:

1. The process of above ceiling permitting/inspection process is to monitor and guide hospital staff, vendors, contractors and sub contractors in the process of proper closure of Non-rated and Rated Wall, floor, and ceiling penetrations. Along with ensuring the following systems are hung correctly (wiring, cabling, ducting, piping, medical air system and seismic hangers). The intent is to maintain Greater Los Angeles Healthcare System (GLAHS) facilities in compliances with VA, The Joint Commission (TJC), and National Fire Protection Agency (NFPA).
2. All rated and non-rated fire and smoke barriers at GLAHS shall be maintained in a condition equal to or better than original construction in terms of fire and smoke safety, during all times of construction, (maintain fire watch if the integrity of any fire/ smoke rating barrier is compromised temporarily during construction). Installing contractors are responsible for the reporting of breaches of any fire or smoke barrier that they create or discover in the course of their operations to COR and Facilities.

3. RESPONSIBILITIES:

A. All contractors, sub contractors and vendors who are required to conduct business above the ceiling are responsible for obtaining an above ceiling permit from the Fire and Safety Department.

B. All contractors, sub contractors and vendors must request final inspection of their work prior to closing of any ceilings.

C. It is everyone responsibility to ensure all systems remain in compliance with the Life Safety Code.

4. PROCEDURES:

- A. All contractors, sub contractors and vendors will be properly identified by a badge and have an above ceiling permit.
- B. The above ceiling permit will be displayed in full view on the ladder(s) in the working area.
- C. Contractors workers will be trained in conducting above ceiling work.. The contractor will visit the area(s) where work will be accomplished to get familiarized.
- D. Ladders used in above ceiling work will not be made of any type of conductive material to protect the technician from electrical shock.

- E. All ladders will have the required OSHA and safety label on their ladders.

- F. Contractors will have all their ladders clearly marked for identification.

- G. The permit may be removed from the ladder only after the work is complete and accepted.

- H. During the periods of above ceiling work the contractor will ensure that no wires will be hanging down in a loop or loose that could cause injury to another person. If wire needs to hang down from the ceiling, they need to hang to the floor or above a height of 7 feet.

- I. No wires, cables or other objects may rest on or be suspended by any fire protection sprinkler piping or supports.

- J. All, piping, ducting, seismic supports, piping hangers, duct hangers etc are to be suspended in accordance with latest codes and standard.

- K. All wiring, (cables CATV, telephone, date etc.) are to be suspended in the proper hangers. They are NOT to be hung or tied in any form or fashion to piping, ducting, ceiling hanger, pipe hanger, etc. or laid directly on top of ceilings or grids.

- L. Any and all wire, cables (CATV, telephone, data, etc.) that penetrated non-rate or rate wall, floor or ceiling will be placed in a sleeve and sealed with the proper fire stop materials and systems. After the fire stop has dried and sealed the wire(s) should not be able to move.

- M. Any penetration through a non-rated or rate fire assembly will require proper fire stopping, even if not specifically noted on drawings. The type of fire stopping must be noted on the permit.

- N. All penetrations will be completed in accordance with UL System for Wall Penetrations.
- O. During the periods of above ceiling work, if the ceiling is going to be abandoned for a period of more than 60 minutes the ceiling tiles will be re-installed, unless approved by COR.
- P. The contractor shall review with Plant Operations department the following morning all penetrations completed the previous day prior to starting the next day's work.
- Q. No materials, tools, ladders, etc. shall be left unattended in public areas at any time without prior authorization from Hospital Representative.
- R. All miscellaneous materials (trash, wall pieces, etc.) are to be removed from above the ceiling.
- S. Contractor to document condition of ceiling tiles and grid prior to work and after work is completed. Upon the completion of the above ceiling work and reinstall of ceiling tiles an inspection will be conducted. Contractor will replace any damaged ceiling tiles at his expense unless otherwise stipulated in the work agreement.

f. LOCKOUT/TAGOUT PERMIT

Contractor to follow OSHA regulations in all Lockout/ Tagout procedures which apply to all work contractor at the GLAHS involving the installation, service, maintenance, adjustment, inspection or other handling of machines, powered equipment, or utility systems where the unexpected release of stored energy could cause injury or death.

- A. Work on or around powered equipment is covered by these procedures if:
 - (1) A person may contact energized components while performing the work.
 - (2) A person is required to remove or bypass any guard, interlock, or other safety device (including equipment covers) to perform the work.
 - (3) A person is required to place any part of his or her body into an area on the machinery or piece of equipment where work is performed during the equipment's operation.
- B. These procedures do not apply to:
 - (1) Minor tool changes and adjustments and other minor service activities that take place during normal operations if they are routine, repetitive, and integral to the use of the equipment for production, provided that the work is performed using alternate measures that provide effective protection. (An example of this would be changing a drill bit on a drill press.)
 - (2) Work on equipment that is connected by a cord and plug where the hazard of the equipment being accidentally turned on or releasing stored energy is

- eliminated by unplugging the equipment and securing the plug. The person working on the equipment must have exclusive control over the plug.
- (3) Work on equipment that cannot be shut down, provided that
 - (a) department management demonstrates that continuity of service is essential,
 - (b) shutdown of the system is impractical, and
 - (c) special equipment is provided or special protective procedures are documented and followed that will provide effective protection for personnel. (Examples include work on certain life-sustaining equipment or utility lines.)

g. MOBILE CRANES PERMIT REQUIREMENTS

- A. Contractor is responsible for requesting a Mobile Crane Permit from the Construction Safety Officer. See VA spec section SECTION 01 35 26 Safety Requirements (also available at <https://www.cfm.va.gov/TIL/spec.asp#01>) for safety requirements of crane operations.
- B. Provide to the VA safety Officer a detailed lift plan and copies of all required registrations, licenses, certificates and permits for cranes and crane operators 14 days prior to scheduled work.
- C. The following requirements supplement or reiterate governing regulations pertaining to safe crane operation.

A. Operators

- (1) Cranes shall be operated only by designated persons. No one other than the personnel specified shall enter a crane cab, with the exception of persons such as oilers, supervisors, and those specific persons authorized by the crane operator whose duties require them to do so, and then only in the performance of their duties and with the knowledge of the operator.
- (2) Before operation, the operator shall have read and understood the operator's handbook for that specific crane.
- (3) In the event a lift is thought to be unsafe by the crane operator, he shall immediately stop the lift operation and report the same to his supervisor.
- (4) The operator shall respond to signals only from the appointed signal man, but shall obey a stop signal at any time, no matter who gives it.
- (5) The operator shall not leave his position at the controls while a load is suspended.
- (6) The operator shall not engage in any practice which will divert his attention while actually engaged in operating the crane.

- (7) The operator shall be trained on each type of crane (equipment specific) before he is allowed to operate it. Documentation will be required.
- (8) The operator shall be responsible for those operations under his direct control. Whenever there is any doubt as to safety, the operator shall have the authority to stop the lift until safety has been assured.
- (9) A crane permit shall be obtained and completed prior to any work/lifts being done.

B. Crane Operations

- (1) Hoisting of any loads shall be promptly discontinued upon indication of any dangerous weather conditions (lightning or high winds, etc.) or other impending danger.
- (2) All personnel shall be kept clear of loads about to be lifted and of suspended loads.
- (3) Cranes of any type shall not be loaded beyond their maximum rated capacity, nor shall they be subjected to any operations, which could exceed their maximum load capacities, such as shock loads.
- (4) The crane shall be uniformly level within one percent of level grade and located on firm footing.
- (5) All personnel shall be kept clear of the cab and counterweights while the crane is in operation. The counterweight swing radius of all cranes must be barricaded.
- (6) Adequate cribbing shall be made available to the operator if needed for proper set-up of crane.
- (7) Outriggers:
 - (a) Each outrigger shall be visible to the equipment operator, or a signal person must be posted if an outrigger is not visible.
 - (b) While extending or retracting outriggers the operator shall give a warning sound, such as sounding the horn or alarm, to notify all personnel in the immediate area that the outriggers are being moved. An automatic warning sound or alarm is the preferred method of warning personnel.
 - (c) A signal person may be used to warn personnel if the equipment is not equipped with an alarm.
- (8) When removing pins or bolts from a boom, workers should stay out from under the boom.

- (9) The operator shall not push or pull anything with a crane boom.
- (10) Check operation of anti two-block system daily to ensure that it is working properly.

C. Lifting

- (1) Cranes are designed and rated to handle freely suspended loads. Never shock load the crane intentionally.
- (2) The weight of the load shall be determined before the lift operation begins. All questionable loads shall be weighed.
- (3) Any lift that exceeds 80% of the load chart shall be considered a non-routine lift.
- (4) The capacity on the load chart shall never be exceeded.
- (5) The “on rubber chart” shall be used unless all outriggers are fully extended and set, and all weight is removed from the tires. There is an exception: some cranes have a partial outrigger extension load chart.
- (6) The minimum number of full wraps of rope remaining on the load line hoist drum when handling any load shall be at least two.
- (7) No pick and carry operation shall be performed from any erected boom extension.
- (8) The use of a crane to hoist employees in a man basket is prohibited.
- (9) Side loading of booms shall be limited to freely suspended loads. Cranes shall not be used for dragging loads sideways.
- (10) When two or more cranes are used to lift a load, a planning meeting shall be held. Only one qualified, responsible person shall be in charge of the operation. He shall be required to analyze the operation and instruct all personnel involved in the lift.
- (11) When lifting loads over roadways, barricades shall be placed to divert traffic.
- (12) The hoist rope shall not be wrapped around the load.
- (13) Proper rigging shall be used.
- (14) Tag lines shall be used to control suspended loads unless it is unsafe to do so.

D. Safe Working Distances

(1) When operating mobile cranes, mobile equipment, aerial lifts, or any mechanical equipment under, by or near power lines they shall be operated in accordance with the following, except where the power lines have been de-energized and visibly grounded at the point of work:

(a) For power lines rated at 69 KV (phase to phase) or less, the minimum clearance between the lines and any part of the equipment shall be at least 10 feet.

(b) For lines rated at greater than 69 KV (phase to phase) the minimum clearance shall be 10 feet plus 4 inches for each 10 kV over 69 KV.

E. Equipment Specifications

(1) Back-up alarm is required.

(2) A fire extinguisher of at least 10 BC shall be kept in the operator's cab.

(3) LMI's (load moment indicators) or anti two block devices should be operational.

(4) Boom angle indicator.

(5) Boom length indicator.

(6) A load-rating chart, with clearly legible letters and figures, shall be provided with each crane, and securely fixed at a location easily visible to the operator.

(7) All controls shall be clearly identified by labels or diagrams.

(8) All hook and ball assemblies and load blocks shall be labeled with their rated capacity and weight.

(9) All hooks shall have a spring loaded hook latch.

(10) A seat belt shall be provided in all single control station wheel mounted cranes for use during transit and travel.

- (11) Principal walking surfaces shall be of a skid resistant type.
- (12) All windows shall be of safety glass, or equivalent.
- (13) A windshield wiper shall be provided on the front window.
- (14) Hand signal chart shall be available on mobile crane.
- (15) Manufacturer's Operating & Safety Manuals shall be maintained on the mobile crane for use or review by the operator.

F. Inspections

- (1) Before each day or at the beginning of each shift (not to exceed twelve hours) the mobile crane shall be given a visual inspection and functional test prior to being operated.
- (2) All cranes shall be inspected monthly by a qualified person and written, signed reports completed.
- (3) Written, dated and signed inspection reports and records shall be made monthly on critical items in use such as brakes, crane hooks, ropes, hydraulic cylinders, and hydraulic relief pressure valves. Records shall be kept where readily available.
- (4) Mobile cranes shall be inspected annually. Complete inspections of the cranes shall be performed by a qualified person and written signed reports completed.
- (5) A preventive maintenance program based on the crane manufacturer's recommendations should be established. Dated and detailed records should be readily available.
- (6) A load test shall be required on the mobile crane if any repairs have been made on any load bearing part.

h. EXCAVATION PERMIT

- A. Contractor to ensure safe practices during excavation work per OSHA standards and all applicable codes and regulations.
 - i. General requirements will take place for all excavations including removal of hazards, determining of all utility installations and contacting all utility companies and property owners involved.
 - ii. Atmospheric testing will take place at all excavation sites.

- iii. Water will be monitored at all excavation sites.
- iv. All surrounding structures to the excavation site will be monitored and supported.
- v. Contractor and his employees to be aware of the warning signs of failure. Notify the Competent Person of any concerns. Do not enter any trench/excavation determined or suspected to be unsafe.

B. General Requirements for all excavations:

- (1) All surface encumbrances that are located so as to create a hazard to employees shall be removed or supported, as necessary, to safeguard employees.
- (2) The estimated location of all utility installations, such as sewer, telephone, gas, electric, water lines, or any other underground installations that reasonably may be expected to be encountered during excavation work, shall be determined prior to opening an excavation.
- (3) Utility companies, electric, gas or property owners shall be contacted within established or customary local response times, advised of the proposed work, and asked to establish the location of the utility underground installations prior to the start of the actual excavation. When utilities or owners cannot respond to a request to locate underground utility installations within 48 hours, or cannot establish the exact location of these installations, the Supervisor on site may proceed, provided the supervisor does so with caution, and provided detection equipment or other acceptable means to locate utility installations are used.
- (4) The estimated location of all utility installations will be determined by a safe and acceptable means.
- (5) Atmospheric Testing: Atmospheric testing will be performed in all excavations employing shoring and greater than 4 feet in depth and where there is a possibility of a hazardous or toxic atmosphere present (i.e., maintenance on all sewer lines, working around natural gas lines, near landfills). Testing will begin prior to entry and shall be continuous while employees are working within the excavation. All requirements shall be met for continuation of work in the excavated areas.
- (6) Protection from Water Accumulation : All excavations producing the hazard of water accumulation will be closely monitored by superintendent/supervisor while work is being performed, and all precautionary measures taken for safe operation as required by regulations..

SECTION VI

List of Permits

1. Interim Life Safety Measures (ILSM)
2. Infection Control Pre-Risk Assessment (ICRA)
3. Hot Work Permit
4. Interstitial Permit and Rules of Conduct
5. Above Ceiling Work Permit
6. Lockout/ Tagout / Tryout Permit
7. Mobile Crane Permit Fire Watch Form
8. Excavation Permit
9. VA ID Application
10. Test & Inspection Request Form
11. Confined Space Entry Form
12. GLA After-hours Work Permit
 - A. Key Agreement With Contractor
 - B. Utility System Maintenance Advisory
 - C. Fire Watch form
 - D. Contractors Daily Fire & Safety Checklist
 - E. Contractor's Daily Log
 - F. VA Construction Invoice Format
 - G. Construction Change Order Forms 08-3385a & 08-3385b