

SECTION 01 3516**ALTERATION PROJECT PROCEDURES****PART 1 - GENERAL****1.01 SECTION REQUIREMENTS**

- A. Coordination Meetings: Conduct coordination meetings specifically for alteration work at appropriate intervals. University's Representative shall record meeting results; and distribute record copies.
 - 1. Attendees: In addition to University's Representatives, and Contractor, each specialist, supplier, installer, and other entity concerned with progress of alteration work activities shall be represented.
 - 2. Agenda: Discuss items of significance that could affect progress of alteration work, including review of the following:
 - a. Fire prevention.
 - b. Areas where existing construction is to remain and the required protection.
 - c. Hauling routes.
 - d. Sequence of alteration work operations.
 - e. Storage, protection, and accounting for salvaged and specially fabricated items.
 - f. Existing conditions and structural loading limitations.
 - g. Collection of waste and recycled materials.
 - h. Protection of occupants and the public.
 - i. Condition of other construction that affects or will affect the Work.
- B. Specialist Qualifications: A firm regularly engaged in specialty work similar in nature and extent to work as specified in each Section and that has completed a minimum of five recent projects with a record of successful in-service performance. Supervisors shall be experienced in specialty work similar in nature and extent to that indicated for this Project.
- C. Alteration Work Program: Prepare a written plan for Project, including protection of surrounding materials during operations. Include dust and noise control, means of egress, debris-hauling routes, and temporary protective barriers.
- D. Fire-Prevention Plan: Prepare a written plan for preventing fires during the Work, including floor plan placement of fire-control devices during each phase or process. The plan shall be posted at each entrance to work areas and include:
 - 1. Location of contractor-owned fire extinguishers
 - 2. Exits to be maintained during construction
 - 3. Meeting point outside the building if there is an issue
 - 4. Language about "hot work" requires a UCI permit, no smoking, and no hot plates
- E. Safety and Health Standard: Comply with ANSI/ASSE A10.6.

- F. Salvaged Materials: Clean loose dirt and debris from salvaged items; crate and cushion items against damage during handling; and label contents of containers. Store and transport items to University's designated storage area.
- G. Salvaged Materials for Reinstallation: Repair and clean items for reuse and reinstall items in locations indicated.
- H. Discrepancies: Notify University's Representative of discrepancies between existing conditions and Contract Documents before proceeding with removal and dismantling work.
- I. Ensure Work is accomplished in a continuously safe manner and University's Representative is kept advised of progress and has safe access to site.

1.02 DEFINITIONS

- A. Remove: Detach items from existing construction and dispose of them off-site unless indicated to be salvaged or reinstalled.
- B. Remove and Salvage: Detach items from existing construction, in a manner to prevent damage, and deliver to University ready for reuse or store on site for reuse.
- C. Remove and Reinstall: Detach items from existing construction, in a manner to prevent damage, prepare for reuse, and reinstall where indicated.
- D. Existing to Remain: Leave existing items that are not to be removed and that are not otherwise indicated to be salvaged or reinstalled.
- E. Demolish: To remove by destroying or ruining the item being careful not to damage existing items remaining. Items mistakenly demolished or damaged that were to remain shall be replaced or repaired at no additional cost to the University.
- F. Dismantle: To remove by disassembling or detaching an item from a surface, using gentle methods and equipment to prevent damage to the item and surfaces; disposing of items unless indicated to be salvaged or reinstalled.

PART 2 - PRODUCTS - (Not Used)

PART 3 - EXECUTION

3.01 HAZARDOUS MATERIALS PROCEDURES:

- A. Except as otherwise specified, in the event Contractor encounters on the Project site material reasonably believed to be asbestos, polychlorinated biphenyl (PCB), mercury, or other hazardous materials which have not been rendered harmless, immediately stop Work in the area affected and report the condition to University's Representative.
- B. The Work in the affected area shall not thereafter be resumed except by written agreement of University and Contractor if in fact the material is asbestos, PCB, mercury, or other hazardous materials and has not been rendered harmless. The Work in the affected area shall be resumed in the absence of asbestos, PCB, or other hazardous materials, or when such materials have been rendered harmless

- C. Gasoline and other flammable or polluting liquids/materials shall not be poured into sewers, manholes, or taps, and shall be disposed of, together with flammable or waste material subject to spontaneous combustion, in a safe manner meeting applicable laws, codes, and ordinances. Appropriate arrangements shall be made for storing these materials outside of building.

3.02 PROTECTION

- A. Prior to commencing Work, Contractor, and University's Representatives shall tour the project site together to examine and record damage to existing adjacent buildings and improvements. This record shall serve as a basis for determination of subsequent damage due to Contractor's operations and shall be signed by parties making the tour. Cracks, sags, or damage to adjacent buildings and improvements not noted in the original survey, and subsequently discovered, shall be reported to University's Representative.
- B. Protect persons, motor vehicles, surrounding surfaces of building, building site, plants, and surrounding buildings from harm resulting from alteration work or spillage.
 - 1. Provide temporary barricades, barriers, directional signage, and covers over walkways to protect and exclude the public from areas where alteration work is being performed.
 - 2. Erect temporary barriers to form and maintain fire-egress routes.
 - 3. Contain dust and debris generated by alteration work, and prevent it from reaching the public or adjacent surfaces.
 - 4. Provide shoring, bracing, and supports as necessary. Do not overload structural elements.
 - 5. Do not apply chemicals during winds of sufficient force to spread them to unprotected surfaces.
 - 6. Collect and dispose of runoff in a manner that prevents soil contamination, soil erosion, undermining of paving and foundations, damage to landscaping, or water penetration into building interior.
- C. Before commencing dust, fumes, or odor producing Work, isolate the existing HVAC system.
 - 1. Disconnect supply and return ductwork in work area from HVAC systems servicing occupied areas.
 - 2. Install additional temporary filters where needed or as directed.
 - 3. Maintain negative air pressure within work area starting with commencement of temporary partition construction, and continuing until removal of temporary partitions is complete.
- D. Protect existing materials, including floors along hauling routes, with temporary protections and construction. Use covering materials and masking agents that will not stain or leave residue on surfaces. When no longer needed, promptly remove protective materials.
- E. Comply with each product manufacturer's written instructions for protections and precautions.

- F. Utility and Communications Services: Notify University's Representative; and entities owning or controlling wires, conduits, pipes, and other services affected by alteration work before commencing operations. Utilities are in most cases owned and under the control of the University's Facilities Management. No adjustment or attachment to utilities shall be made without approval of Facilities Management. Disconnect and cap pipes and services only when directed by University and provide temporary services during interruptions to existing utilities.
 - 1. Notify University's Representative in writing a minimum of 72 hours (except utility shutdowns or connections require 14 days) in advance of activities that will be outside the contract limits or that would interfere with the University's daily operation.
- G. Drawings show, if applicable, existing above and below grade structures, drainage lines, storm drains, sewers, reclaimed and potable water, natural gas, electrical, high temp water, chilled water, and other utilities known. Reference drawings are available and will be made available for review upon request.
 - 1. Location of existing installations shall be determined before proceeding with construction operations which may cause damage to such installations. Existing installations shall be kept in service where possible and damage to them shall be repaired with no adjustment of Contract sum.
 - 2. If other structures or utilities are encountered, request University's Representative to provide direction on how to proceed with Work.
 - 3. If a structure or utility is damaged, appropriate action shall first be taken to ensure safety of persons, then contact University's Representative, take action to protect property and then repair when it is safe and University has given direction. Damage to existing utilities shall be repaired with no adjustment of Contract amount.
- H. Structure Protection: When placing of materials and/or equipment, tools, machinery, or other items, protect and prevent overloading of University facilities beyond their safe calculated carrying capacity.
- I. Isolation of Work Areas in Occupied Facilities: Prevent dust, fumes, and odors from entering occupied areas. Maintain dust partitions during the Work. Use vacuum collection attachments on dust-producing equipment. Isolate limited work within occupied areas using portable dust-containment devices.
- J. Existing Drains: Prior to the start of work in an area, verify that drainage system is functioning properly. Notify University's Representative immediately of inadequate drainage or blockage. Do not begin work until the drainage system is functioning properly.
 - 1. Prevent solids or other debris from entering the drainage system. Clean out drains and drain lines that become sluggish or blocked from alteration work.

3.03 PROTECTION FROM FIRE

- A. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with CFC Article 87.

1. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition in accordance with requirements of EH&S. Obtain Hot Work Permits from EH&S and comply with Welding, Burning, and Cutting Program. How to obtain a Hot Work Permit is located at:
<http://www.ehs.uci.edu/programs/fire/hotworkprog.html>
 2. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with University's Representative and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.
 3. Superintendent shall walk entire project at least once a week to make certain these conditions and requirements are being adhered to.
 4. Open fires are not allowed.
 5. Only a reasonable working supply of flammable building material shall be located inside of, or on roof of, a storage facilities.
- B. Fire Watch: When working with heat-generating equipment or combustible materials, station personnel to serve as a fire watch at each location where such work is performed. Fire-watch personnel shall have the authority to enforce fire safety. Station fire watch in accordance with NFPA 51B and NFPA 241.
- C. Fire-Control Devices: Maintain fire extinguishers, fire blankets, and rag buckets for disposal of rags with combustible liquids.
- D. Fire Sprinklers: If existing, maintain fire sprinkler protection without interruption. While operations are performed close to sprinklers, shield them temporarily with guards and remove guards when nearby work is paused or completed.

3.04 PROTECTION DURING APPLICATION OF CHEMICALS

- A. Protect motor vehicles, surrounding surfaces of building, building site, plants, and surrounding buildings from harm or spillage resulting from applications of chemicals and adhesives.
- B. Cover adjacent surfaces with materials proven to resist chemicals selected for Project unless chemicals being used will not damage adjacent surfaces as indicated in alteration work program. Use waterproof and UV resistant covering materials and masking agents that will not stain or leave residue on surfaces to which they are applied. Apply protective materials according to manufacturer's written instructions. Do not apply liquid masking agents or adhesives to painted or porous surfaces. When no longer needed, promptly remove protective materials.
- C. Do not apply chemicals during winds of sufficient force to spread them to unprotected surfaces.
- D. Neutralize alkaline and acid wastes and legally dispose of off University's property.
- E. Collect and dispose of runoff from chemical operations by legal means and in a manner that prevents soil contamination, soil erosion, undermining of paving and foundations, damage to landscaping, or water penetration into building interior.

3.05 GENERAL ALTERATION WORK

- A. Record existing work before each procedure (preconstruction), and record progress during the work. Use digital preconstruction documentation photographs or video recordings.
- B. Perform surveys of Project site as the Work progresses to detect hazards resulting from alterations.
- C. Notify University's Representative of visible changes in the integrity of material or components, including cracks, movement, or distortion. Do not proceed with the work in question until directed by University's Representative.

END OF SECTION