PART 1 - GENERAL

1.1 SUMMARY

A. This Section specifies minimum requirements for safety on the construction site including:

1. Contractor responsibility (regarding safety)
2. Contractor safety program and plan submittals
3. Contractor safety requirements
4. Contractor safety reporting
5. Construction "fire safety" requirements
6. Chemical hazard communication
7. Chemicals of interest reporting

B. Owner's forms referenced in this Section include (see Appendix A):

1. Chemicals of Interest – Contractor Declaration and Reporting Form

C. For additional provisions related to safety precautions, refer to the General Conditions.

1.2 CONTRACTOR RESPONSIBILITY

A. The Contractor is solely and completely responsible for compliance with all applicable laws, codes and regulations regarding safety (whether noted in this Section or not) and for creating and maintaining a safe working environment, including safety of all persons and property on the jobsite (whether the requirements of this Section address a particular situation or not).

B. The Contractor shall maintain the jobsite and perform the Work in a manner which meets or exceeds statutory and regulatory requirements for the provision of a safe place to work and which minimizes safety risks to personnel of the Contractor, Subcontractors, Owner, general public or other parties. This obligation shall apply continuously and not be limited to normal working hours.

1. The Contractor shall ensure that all Contractor and Subcontractor personnel are provided sufficient training, and shall take such actions as are necessary to maintain a safe environment on the construction site. Such training and actions shall include, but not be limited to, ensuring that such employees are familiar with governing construction safety requirements and the requirements for compliance with applicable regulations.

2. The Contractor shall monitor the jobsite to ensure that employees do not create unsafe conditions for others, and to comply with the provisions of the Site Specific Safety Plan.

3. The Contractor shall establish and communicate clear expectations to its employees and Subcontractors of any tier (and their employees) of their obligation to notify the Contractor and any at risk party of any potential health or safety hazard affecting themselves or others.

4. The Contractor shall conduct on-site safety meetings weekly, or other frequency as appropriate, that shall be mandatory for all employees.

C. The Contractor shall designate a full-time on-site competent individual to be the "Safety and Health Officer" who is qualified and authorized to supervise and enforce compliance with the Contractor's Site Specific Safety Plan during the performance of the Work. The Contractor is responsible to ensure that all necessary monitoring equipment, protective clothing, and other supplies and equipment are available to implement the Plan.

1. The Contractor shall require each Subcontractor to provide a fulltime on-site safety manager (competent individual) for the duration of work at the Project site. If the man-load is below fifty (50) field workers, the Subcontractor may designate its Superintendent as the safety manager. If the man-load is fifty (50) or above field workers on-site, the Subcontractor shall provide and designate a dedicated competent individual as safety manager whose sole responsibility is Project safety including, but not limited to: review pre-task plans, critical lift plans, rigging and installation means and methods, fall protection, trenching excavations, electrical safety, Occupational Safety and Health Administration (OSHA) and Washington Industrial Safety and Health Act of 1973 (WISHA) regulations compliance, and second tier Subcontractor safety monitoring and compliance.

D. Safety Violations: In the event of WISHA violations by the Contractor or any of its suppliers or Subcontractors of any tier for unsafe practices involving imminent danger to personnel of the Owner, Contractor, Subcontractors, or others, the Contractor shall immediately correct the hazardous situation which caused the violation prior to any work continuing in the affected area. If such violations exist and corrective actions have not been taken by the Contractor, the Owner may order the Contractor to stop work (to be followed up in writing the same day), until satisfactory corrective action has been taken per Article 3.04 of the General Conditions.

1.3 CONTRACTOR SAFETY PROGRAM AND PLAN SUBMITTALS

A. Company Safety Program: The Contractor shall submit a copy of its Company Safety Program to the Owner. The Company Safety Program shall contain, at a minimum, the following elements:

1. Organizational Structure: Include names of individuals who will perform safety duties, titles, work assignments, authority and reporting relationships.

2. Training Program: Who, how, and when training is provided; method of employee training concerning safety rules and procedures; and training in use of protective equipment.

3. Protective Equipment: List of personal protective equipment to be provided to employees.

4. Accident Prevention and Loss Control Plan: Work site inspection and hazard correction procedures; disciplinary procedures for safety infractions; and accident response (investigation and reporting procedures).

B. Site Specific Safety Plan: The Contractor and each of the Contractor's Subcontractors shall review the Contract Documents, and the Contractor shall develop and submit a copy of a "Site Specific Safety Plan" to the Owner. The Site Specific Safety Plan shall be tailored to the unique issues of the Project and the specific types of hazards likely to be encountered throughout all phases of the Work, be in compliance with WISHA and all other regulatory requirements, and contain, at a minimum, the following elements:

1. Application of Company Safety Program: The Site Specific Safety Plan shall address how the elements listed in this Section 1.3A will be specifically applied and modified in addressing the unique issues related to the Project.

2. Specific Hazards: The Site Specific Safety Plan shall address, as applicable, the following, and other specific hazards for the Project:

   a. Odor notification
   b. Excavation and rescue plans
   c. Pedestrian safety (including on Husky Game and/or other special event days)
   d. Overhead hazards and flying objects
   e. Hot works
   f. Hazardous materials and chemical exposure
   g. Methane abatement
   h. Safety issues related to Owner's "Prior Occupancy"
   i. Working over water
   j. Rigging - aerial lifts and forklifts
   k. Electrical safety
   l. Scaffolding and personnel lifts
   m. Noise and dust
   n. Lockout/Tagout and control of hazardous energy
   o. Work in confined spaces
   p. Housekeeping and safe access
   q. Silica
   r. Fall prevention
   s. Steel erection activities
   t. Crane safety

1.4 CONTRACTOR SAFETY REQUIREMENTS

A. Safety Training: Contractor shall provide construction site orientation for all employees (including Subcontractor employees) to become familiar with the Site Specific Safety Plan prior to commencing work. Contractor shall, on a weekly basis, perform safety training on hazards specific to the phase of work for all employees. These meetings shall be mandatory for all construction employees.

1. Subjects should include site specific safety issues and procedures and discussion of corrections resulting from any violation in safety procedures. A log of subjects covered and a copy of the attendance records of each meeting shall be submitted to the Owner's Representative on the day the meeting occurs.

B. Respiratory Equipment: Any personnel performing work requiring the use of respiratory protective equipment shall be fully trained in the use of such equipment. Contractor must

have a respiratory protection program and ensure that all workers wearing respirators have medical clearance and fit testing, as appropriate, for the type of respirators used.

C. Personal Protective Equipment: Contractor shall ensure all construction personnel are equipped with and utilize personal protective equipment in accordance with Labor and Industries standards. As a minimum requirement, all personnel working on the construction site shall be required to use approved hardhats, safety glasses, appropriate gloves, and substantially constructed work boots. In addition, high-visibility safety apparel shall be worn in accordance with the American National Standards Institute and the International Safety Equipment Association (ANSI/ISEA) standard 107-2004.

D. First Aid: The Contractor shall maintain at the Contractor's field office, or other well known place at the Project site, all materials (e.g., a first aid kit) necessary for giving first aid to the injured, and shall establish, publish, and make known to all employees procedures for ensuring immediate removal to a hospital or a doctor's care, persons (including personnel) who may have been injured on the construction site. Construction personnel shall not work on the construction site before the Contractor has established, and made known, procedures for removal of injured persons to a hospital or a doctor's care. If the Contractor and/or any Subcontractors work crew consist of five or more employees, the Contractor shall ensure that at least one of such employees has a valid and effective first aid card.

E. Safety Walkthrough: In addition to WISHA requirements, the Contractor shall conduct a safety walkthrough of the Project with the Owner's Representative a minimum of once a month during the course of construction. If a safety manager is required for any Subcontractor, the safety manager shall also attend the safety walkthrough. The Contractor shall:

1. Document and maintain a written record of the hazards and unsafe practices noted during the walk-through and provide copies to the Owner as requested;

2. Ensure that corrective action is promptly taken to eliminate the items recorded; and

3. Maintain copies of all inspections performed by other competent individuals on the construction site during the course of construction.

F. Job Hazards Analysis: The Contractor shall plan daily work, considering procedures with the potential for personnel injury and implement appropriate practices to avoid injuries with focus on engineering controls, personal protective equipment needs, and mitigation for exposure to cuts and lacerations. At each construction progress meeting, the Contractor shall present its plan for addressing hazards likely to be encountered in the next week.

1. The Contractor shall develop and implement a program requiring task planning at the foreman level, including at the Subcontractor's foreman level.

1.5 CONTRACTOR SAFETY REPORTING

A. Reporting Injuries and Incidents: Contractor shall immediately notify the Owner's Representative of any injury or incident to persons, including personnel, on the construction site. Contractor shall conduct an immediate investigation with an emphasis on preventative actions and lessons learned. The Contractor and its Subcontractor shall document the

investigation and submit a hard copy of the report on OSHA Form 301 "Injury and Illness Report," or equivalent, to the Owner within 24 hours of the incident. The Contractor shall report on a monthly basis the total number of hours worked on-site by the Contractor's employees and Subcontractors, and the total number of recordable incidents and lost time accidents. Contractor shall submit copies of the Project First Aid Log to the Owner's Representative on a monthly basis.

B. Reporting Potentially Serious Hazards: Contractor shall immediately notify the Owner's Representative of any potentially serious hazard to persons, including personnel, on the construction site. Contractor and its Subcontractor shall conduct an immediate investigation and submit a report to the Owner's Representative within 24 hours of becoming aware of the potentially serious hazard. The report shall describe the potentially serious hazard, the results of the Contractor's investigation, and any steps the Contractor has taken to prevent an injury or incident from occurring based on the potentially serious hazard.

C. Emergency Procedures:

1. For emergencies requiring an ambulance, fire department, or police assistance, the Contractor shall call emergency services (fire and police at 911).

2. Should the Contractor find it necessary to call for non-emergency police assistance or protection in the exercise of the Contractor's responsibilities on the Seattle Campus, the Contractor shall call the University Police Department at 206-543-9331.

3. If an emergency incident occurs within the UW Medical Center (UWMC), the Contractor shall also contact UWMC staff by calling from internal UWMC phones.

4. The Contractor is responsible for obtaining copies of and complying with all Harborview Medical Center emergency response protocols.

1.6 CONSTRUCTION FIRE SAFETY REQUIREMENTS

A. Fire Safety During Construction and Demolition: The Contractor shall conform to Chapter 1, "Fire Safety During Construction and Demolition," of the International Fire Code, as locally amended, and any additional provisions as outlined herein for precautions against fire, flammable and combustible liquids, flammable gases, explosive materials, fire protection, fire reporting, fire fighting access, means of egress, standpipes, fire sprinklers, and roofing operations.

1. The Contractor shall provide adequate separation between Owner-occupied buildings and construction trailers and sheds.

B. Hot Work Procedures:

1. Contractor shall establish a system for documentation and control of "hot work" activities which include the use of portable gas, grinding, or arc welding equipment and conduct operations in a manner that is fire-safe for the work area and adjacent areas. Hot work permits are to be posted at the jobsite in an accessible and conspicuous location. Maintain the premise clear of rubbish, debris, or other materials constituting a potential fire hazard. The local fire code is incorporated herein by reference; adhere to

all applicable provisions as determined by the local fire department. Contractor and Subcontractors shall obtain from the local Fire Department engineering inspection section a permit for all hot work activities prior to performing this Work.

a. Whenever practical, the Contractor shall perform cutting and welding operations off-site.

2. Maintain copies of all hot work related permits for Owner's review upon request, including, but not limited to:

   a. Cutting and welding;
   b. Roofing / hot-tar kettle; and
   c. Storage of flammable materials (e.g., propane, butane) and/or compressed gases.

3. Prior to conducting hot work activities, the Contractor shall ensure all of the following fire safety precautions have been taken:

   a. Cutting and/or welding equipment must be thoroughly inspected and found to be in good repair, free of damage or defects.

   b. A multi-purpose dry chemical, portable fire extinguisher must be located so that it is immediately available to the area of work and is fully charged and ready for use.

   c. At least one fire alarm pull station or means of contacting the fire department (i.e., site telephone) must be immediately available and accessible to person(s) conducting the cutting/welding operation.

   d. Floor areas under and at least 35 feet around the cutting/welding operation must be swept clean of combustible and flammable materials.

   e. All construction equipment fueling activities and fuel storage must be located at least 35 feet away from cutting/welding operations.

   f. Fire resistant shields (e.g., fire retardant plywood, flameproof tarpaulin, metal, etc.), must cover combustible floors.

   g. Combustible materials and finished surfaces, equipment, electrical cables, and personnel must be provided with protection to prevent damage or injury from molten metal, falling sparks, and welding arcs.

   h. Spark / slag catchers (e.g., fire retardant plywood, flameproof tarpaulin, metal, etc.) must be suspended below any elevated cutting/welding operation.

   i. All floor and wall openings must be covered to prevent sparks/slag from traveling to other unprotected area.

   j. Containers in or on which cutting/welding will take place must be purged of flammable vapors.

C. Fire Systems Shutdowns, Impairments, and Fire Watch

1. When it is necessary to shut down existing fire alarm systems or suppression systems for switch-over purposes, or any other reason that leaves the building unprotected, the Contractor shall provide a continuous Owner-approved "fire watch" in accordance AHJs and the following (unless the Contractor provides an Owner-approved temporary equivalent system or the Contractor is specifically excepted by the Owner):

   a. Person(s) assigned to a fire watch must be trained in the use of the portable fire extinguisher.

   b. Fire watch personnel must have an immediate means of providing notification to the fire department (e.g., cellular phone, land-line phone, two-way radio to a continuously staffed position) and the University Police.

   c. Continuous rounds to cover all areas of the building where the fire protection system is out-of-service are required every 15 minutes.

      (1) Exception for Building Code type "B occupancy" buildings: During the hours a B occupancy building is occupied, building occupants performing their duties, including construction personnel, may act as a fire watch in lieu of a designated fire watch, when approved in writing by Owner.

         (a) A fire watch is required at all times in unoccupied areas.

         (b) Other building code occupancy types may be allowed this exception when approved in writing by the Owner.

   d. A log of rounds shall be maintained to include the name of the person performing the fire watch, the hours worked (including start and stop times), and comprehensive notes.

2. Fourteen (14) calendar days written notification shall be provided to the Owner's Representative requesting approval for fire protection system shutdown or functional impairment; receipt of written approval from the Owner's Representative is required before any system shutdown or functional impairment.

   a. In occupied buildings, include a plan indicating a method to notify all occupants.

   b. Notify the local fire department. In Seattle, the number to report out-of-service systems and equipment is 206-233-7219.

3. The Contractor shall work in cooperation with the Owner to identify fire alarm initiating devices in and adjacent to the Project site that may activate from construction activities (i.e., work that creates dust, smoke, steam, heat, etc.) and develop a plan to temporarily cover, remove, or disable through programming these devices to eliminate the potential for false alarms.

a. The Owner may authorize in writing some devices to be disabled for the duration of the Work or for a particular activity without requiring a continuous "fire watch" for one shift or several days depending on circumstance.

b. ONLY OWNER PERSONEL SHALL DEACTIVE OR DISABLE EXISTING FIRE DETECTION AND SUPPRESSION SYSTEMS, unless the Contractor is specifically authorized in writing by the Owner to do so.

c. If the fire alarm system at HMC has been deactivated at the request of the Contractor and the Contractor leaves the construction site without informing the Owner of the need to reactivate the fire alarm system, a charge of $500 shall be assessed for each event. The Contract Sum will be amended for such amount by Change Order.

D. Fire Alarm/Suppression Systems False Activation or Discharge: Most existing Owner buildings have active fire detection and suppression systems. If proper procedures as outlined in the Contract Documents and this Section 1.6C are not followed to ensure the unnecessary activation or deactivation of these systems, the Owner may at its sole discretion impose an emergency response charge of $350 per occurrence to the Contractor and require a fire watch at the Contractor's cost. The Contract Sum will be amended for such amount by Change Order.

E. Fire Extinguishers Required for Construction: Provide multipurpose dry chemical portable fire extinguishers for the Work in accordance with the International Fire Code Chapter 14, as locally amended, and as required by WISHA and other applicable regulations. Existing building fire extinguishers or new fire extinguishers specified by the Contract Documents for the Project do not alleviate Contractor's responsibility to provide temporary fire extinguishers for the Work.

F. Standpipes Required for Construction: In new multi-story construction (four or more stories in height) a Class I standpipe shall be provided in accordance with Chapter 14 of the International Fire Code, as locally amended, for use during construction. Fire Department connections at bottom of standpipe shall be clearly marked and accessible at all times for fire department personnel and equipment. This requirement shall be reviewed and approved by the Owner's Representative.

G. Existing Fire Separations: Existing fire separations, including floor-to-floor separations, shall not be impaired by construction activities.

H. Occupant Egress in Existing Buildings: The Contractor shall not block active exits, exit hallways, exit corridors and the exit access to a public way.

1. Exits are to remain free of construction materials, equipment, and rubbish at all times, unless approved by Owner.

2. For HMC, Work which blocks or restricts exit corridors shall only occur at night with prior approval of the Owner. If approved, work that blocks or restricts exit corridors must be cleared by 6:00 a.m. each day.

I. Emergency Access: Outdoor storage and staging operations and construction fencing shall not impede egress, restrict or narrow fire fighting access (including roads or lanes), or present a fire exposure to existing buildings.

1. Access to emergency services including, but not limited to, fire hydrants, fire department connections, fire command centers, fire alarm panels, valves and similar equipment and systems for emergency vehicles and emergency response personnel must be kept free and unobstructed at all times, unless specifically approved by the Owner.

2. Temporary obstruction of emergency access may be allowed for special cases (e.g., crane installations and hoisting) on a short-term basis. A written plan must be submitted to the Owner for approval at least two weeks prior to the scheduled date of obstruction.

1.7 CHEMICAL HAZARD COMMUNICATION

A. General: The Owner and the Contractor are responsible under the Washington Administrative Code 296-800-170 through 296-800-18020 (Employer Chemical Hazard Communication) to provide a safe and healthy environment for their employees.

B. Responsibilities:

1. The Owner maintains a centralized collection of all Material Safety Data Sheets (MSDS) for Owner materials. These MSDS are available to the Contractor if an unknown chemical is discovered in the work area; a worker is concerned about exposure; and the Contractor suspects the material originates with the Owner.

a. The Contractor shall coordinate with the Owner’s Representative to receive this information.

2. The Contractor shall establish a Chemical Hazard Communication Program (WAC 296-155-180) which includes multiemployer workplaces (WAC 296-800-17007), and provide hazard communication information and training to its employees and the employees of the Contractor’s Subcontractors (of any tier).

a. The information shall include: signage demarcating regulated areas and entrances; signage indicating the location of the Contractor’s binder containing all MSDS used for Construction; and prominently posted lists identifying all hazardous chemicals present in the workplace.

b. In addition to MSDS training which is regulated by the Employer Chemical Hazard Communication standard, training shall include those MSDS that are available for any Owner's chemical product present at the jobsite.

3. The Contractor shall provide the Owner chemical hazard information (MSDS) for all chemical products the Contractor and the Contractor’s Subcontractor’s (of any tier) bring onto the jobsite for Owner’s information prior to application including, but not limited to, all paints, glues, mastics, epoxies and cleaning products.

a. At the jobsite, the Contractor shall establish and maintain a binder(s) of all hazardous chemicals MSDS used for Construction and indicate where utilized.

(1) The MSDS shall be bound in a slant-D, 3-ring, view binder with clear vinyl overlay inserts on the front cover and spine. The binder shall have heavy duty nylon reinforced hinges.

(2) The binder shall have a cover slip sheet and a spine sheet typed with "MSDS used for Construction," University Project name, University Project number, University Facility number, A/E name, and Contractor name.

(3) The MSDS shall be organized by specification division and section with tabbed dividers between the sections or, when presented in a logical format by Contractor and approved by Owner, between categories.

1.8 CHEMICALS OF INTEREST REPORTING

A. Prior to work being performed by the Contractor and/or the Contractor's Subcontractors (of any tier), the Contractor shall submit to Owner a completed "Contractor Declaration and Reporting Form for Department of Homeland Security – Chemicals of Interest" for chemicals listed in 6 CFR (Code of Federal Regulations) Appendix A to Part 27 that will be used on the jobsite. Individual declarations shall be provided by the Contractor and the Contractor's Subcontractors (see Appendix A of the Specifications for a copy of the form).

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION