Construction Environmental Health and Safety Exhibit:
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I. General Requirements

Each construction project at Harvard University shall utilize the Safety Management Systems outlined below, at a minimum. This system is intended to provide the HUPM and **General Contractor** with the basic guidelines for implementation of a construction-specific Safety Management System including policy, processes, instruction, and documentation. This system focuses heavily on project management at all tiers, employee participation, planning, plan implementation, internal analysis and improvement, and management review. The goal of the Safety Management System is a project where continual improvement, no matter the duration of the construction project, is keyed to the success of the project.

II. University Construction Safety Goals

The University's Construction Projects Review Committee and Construction Management Council have established a set of campus-wide goals and objectives for all construction projects conducted at or on behalf of the University. **Contractors** of every tier are encouraged to establish an additional set of goals and objectives that exceed the items listed below.

A. Each project will establish and clearly communicate to all project **Employees** the goal of zero fatalities and debilitating injuries.
B. The overall project goal for DART injuries/illnesses will be twenty-five percent (25%) lower than the most recent DART rate (as of project inception date), as published by the Bureau of Labor and Statistics, for the North American Industry Classification System (NAICS) Code 23 – Construction. This goal shall be clearly communicated to all project staff and **Employees**. Project Management shall review the current DART rate as part of the Monthly Management Safety Meeting.
C. The overall project goal for TRC injuries/illnesses will be twenty-five percent (25%) lower than the most recent TRC rate (as of project inception date), as published by the Bureau of Labor and Statistics, for the North American Industry Classification System (NAICS) Code 23 – Construction. This goal shall be clearly communicated to all project staff and **Employees**. Project Management shall review the current TRC rate as part of the Monthly Management Safety Meeting.
D. Where applicable, the overall project goal for compliance, as measured by or recorded in Predictive Solutions, shall be ninety percent (90%). Each main category within Predictive Solutions shall also maintain the same compliance goal of 90%.

Any projects not meeting the above-listed goals for a period of greater than 30 days shall develop and implement a 'recovery plan' with the purpose of meeting or exceeding the goal(s). This plan shall comply with Section IV of this Exhibit. This plan shall include a description of methods, policy amendments, procedures, responsibilities, and an implementation schedule for the actions required to obtain the established goal(s). It is the responsibility of the **General Contractor** to oversee the development and implementation of this plan, and to monitor the progress made towards achieving the established goal(s). This plan shall be reviewed and updated/amended monthly by the project management team until such time as the goals have been met or achieved.

III. Accountability Plan

A. The **General Contractor** shall implement an Accountability Plan for the project. The Accountability Plan shall include disciplinary procedures to be utilized where compliance by a **Contractor** or **Employee** is not met. The following program elements shall be applied, at a minimum, for **Employee** or **Subcontractor** Non-Compliance:
   1. The first offense shall require the **General Contractor** to issue a written warning to the employer, noting the specific **Employee** and infraction.
   2. The second offense shall require the **General Contractor** to host a meeting with the non-compliant contractor. Attendees required at this meeting include the **General Contractor's** project manager,

superintendent and safety manager, as well as the non-compliant contractor's management. The objective of the meeting is to identify the root cause of the infraction and determine corrective actions to prevent recurrence.

3. The third offense shall require the **General Contractor** to escalate the disciplinary actions. Escalation may include removal of the employee (either **General Contractor** or **Subcontractor**) from the project permanently or issuance of a monetary fine to the employer, for a sum of no less than $5,000 or other means equally effective in preventing recurrence.
4. Where disciplinary action is taken against an employee, the employee's **Foreman** or supervisor shall also be held accountable. Where repeat offenses by employees under the supervision of a single **Foreman**/supervisor occur, the disciplinary action for the **Foreman** shall be escalated for each infraction, in compliance with this section.

B. The owner (or OCIP Program Safety Director for OCIP projects) reserves the right to hold accountable any **General Contractor** for non-compliance with federal, state, and local regulations, and the requirements outlined in the Harvard Construction EH&S Standard. The following actions may be taken:
1. Withholding of payment until such time as corrections have been made.
2. Correction of unsafe conditions by the owner or owner's representative, with charges for the corrective action levied against the **General Contractor**.
3. Dismissal of the **General Contractor** from the project, or dismissal of any **General Contractor** staff or tradesman responsible for the infraction or non-performance.
4. Issuance of a monetary fine to the **General Contractor**, for a sum of no less than $5,000. All fines shall be issued via a deduct change order.
5. Failure of a **Contractor** to return an injured employee to modified or restricted duty after he/she has been released by the treating physician is cause to issue a monetary fine in the amount of $1,500 per week.
6. Failure to complete the Supervisor's Accident/Incident Form or failure to report a known incident/injury within 24 hours to the insurance carrier is cause to issue a monetary fine in the amount of $500, each occurrence.

C. Any of the actions listed above may be superseded by permanent removal or monetary fines for infractions of policy/regulation related to life-threatening acts.

IV. Annual Program Evaluation and Improvements Plan

A. Each project greater than one (1) year in duration shall evaluate the state of the safety program at a minimum of once annually. The **General Contractor** shall coordinate and chair a meeting with project management (including the HUPM & HUEH&S) team to evaluate and review the project's performance from the date of inception. This meeting shall be repeated once per year on or about the date of inception.

B. The **General Contractor**, in consultation with HUEH&S (and the Graham Company for OCIP projects), shall compile the data and documents required to perform the evaluation. The following criteria and performance shall be evaluated:
1. Comparison of project injury experience to the most current benchmark;
2. Review of incidents involving lost or restricted time, and public incidents;
3. Comparison of anticipated loss ratios versus actual loss ratios;
4. Compliance with the project safety inspection expectations (Predictive Solutions);
5. Review of the project compliance ratings, by category (Predictive Solutions Analysis);
6. Effectiveness of the Incident Review process (repeat injuries);
7. Effectiveness of the project's training and orientation program;
8. Status and effectiveness of the Employee Participation Program;
9. Effectiveness of project-wide communications related to safety;
10. Review of management involvement and effectiveness.

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C. The last action of the program evaluation meeting shall be to determine actions for the improvement of the project safety program, where elements of the program are determined to be sub-standard or ineffective. The meeting chair, along with the attendees, shall develop a list of actions, responsibilities, and required implementation times. This list, along with the meeting minutes, shall be published to each meeting attendee. The meeting minutes and action list shall be distributed to each project **Contractor** for review with their project employees.

D. The **General Contractor** shall track the progress of the action list until all actions have been completed and effected. Where action item requirements are not met, the HUPM and HUEH&S reserve the right to meet with the **General Contractor** to determine the reason for the inaction, and a recovery plan shall be developed by the **General Contractor**, in consultation with the HUPM and HUEH&S.

V. Communication of Safety-Related Items

A. The **Project Safety Manager** shall be responsible for communication of safety-related items to the entire project, including the HUPM and **Contractors** of every tier. Communications shall be made under the following circumstances, at a minimum:
   1. Where an incident occurs on the project, including injury (where medical treatment is required, OSHA recordable, or more severe), property damage, or near miss;
   2. Where trends or elevated frequencies in minor injuries are observed or noted (e.g. minor lacerations, foreign objects in the eye, etc.);
   3. Where trends in safety compliance are noted or observed (i.e. via SafetyNet compliance reports or by visual observation);
   4. Where established benchmarks, including incident rates or loss ratios are not met;
   5. Any time a recovery plan for a certain operation or project is implemented;
   6. Following the annual safety program evaluation and improvements meeting.

B. The communication shall be either delivered verbally to the project during the Monthly Mass Safety Meeting (for minor items) or shall be in writing via a Safety Bulletin issued by the **Project Safety Manager**. Where issued via Safety Bulletin, it shall be distributed to all project **Contractors** to be used as a Tool Box Talk by each **Contractor**.

VI. Competent Persons

A. A **Competent Person**, as defined by OSHA29CFR Part 1926.32(f) is required where **Contractors** are performing any of the activities listed below. The **Competent Person** is responsible for inspection of the operations for which he/she is listed as the **Competent Person**, as well as identification and correction of hazards.

B. Each **Contractor**, of every tier, is required to identify in writing the name of the **Competent Person** assigned to the project, specifically for the following areas:
   1. Aerial Lifts; Asbestos; Bolting/Riveting/Fitting; Concrete/Forms/Shoring; Confined Space Entry; Cranes/Derricks; Demolition; Electrical/LO/TO; Excavation/Trenching; Fall Protection; First Aid/CPR; Forklift Trucks; Hazardous Materials/Waste Handling; Hearing Conservation; Ladders; Lead; Material Handling; Rigging; Scaffolding; Welding/Cutting.

C. Prior to commencement of project activities, each **Subcontractor** must complete the **Competent Person** Identification Form (available on the Harvard EHS website), and submit this form to the **General Contractor** for the project files. Re-submission of the **Competent Person** Identification Form is required any time the **Competent Person** or alternate changes.

D. For each **Contractor**, regardless of tier, the **Competent Person** Identification Form shall be used to deliver a Tool Box Talk to the project workforce, describing the roles and responsibilities of the **Competent Person**(s), as well as identification of the **Competent Person**(s) specific to that project. This Tool Box Talk shall be re-delivered as necessary when changes to the project workforce are made.

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VII. Emergency Management Plan

A. The **General Contractor** shall develop a program, specific to that project's operations, which meets or exceeds the guidelines listed in the Harvard Construction EH&S Standard. This program shall be updated and re-issued as conditions (i.e. location of fire fighting equipment or changes in project personnel) change. The Harvard Construction Emergency Management Plan Worksheet (available on Harvard EHS website) may be used to satisfy this requirement. NOTE: Dependant upon the complexity and scope of the project, the Harvard Construction Emergency Management Plan Worksheet may need to be supplemented with additional information. It is the responsibility of the **General Contractor** to assess this need. At a minimum, this program must address/list/identify the following:
   1. Preparation for emergency response, including orientation and training;
   2. Mock emergency drills, including coordination and frequency (no greater than every six (6) months. NOTE: Where an actual drill cannot be performed due to project location restrictions (i.e. occupied structures), a scenario (table top) drill shall be performed at the same frequency, with all parties participating;
   3. Roles and responsibilities for the project action team;
   4. First Aid policy and procedures;
   5. External communication of an emergency;
   6. Internal (project) communication during an emergency;
   7. Contact names and numbers for project personnel and emergency services;
   8. Control of the site during emergency responses, including emergency response access;
   9. First hour response procedures (at least up through turnover to the responding emergency response group and/or Incident Commander);
   10. Location(s) of emergency and spill containment equipment located on the project;
   11. Evacuation procedures, including signaling of evacuation, rally points, and re-entry;
   12. Incident Investigation procedures, reporting, and forms;
   13. External entity involvement (OSHA, Insurance Company).
   14. Project security measures. Project security measures shall comply with contract documents, but at a minimum, reasonable security precautions shall be implemented by the General Contractor to prohibit intrusion into project areas.

B. Emergencies and their associated responses must be individually planned for in advance. Each type of possible or anticipated emergency shall include a list of actions, the responsibilities for the actions, and the listed roles of project personnel. At a minimum, the following items must be addressed in the Emergency Management Plan:
   1. Incidents involving injury to personnel, including bodily injury and death;
   2. Incident involving injury to the public or students;
   3. Incidents involving damage to property, public and project;
   4. Collapse of a building or portion thereof;
   5. Bomb threats, security risks, or terrorist attacks;
   6. Fire and explosion;
   7. Utility failures and associated events;
   8. Equipment failure such as crane collapse or loss of load;
   9. Workplace violence events;
   10. Natural disasters (hurricane, flood, earthquake) and severe weather events;
   11. Environmental releases;
   12. Events involving media coverage;

C. The Emergency Management Plan shall be submitted to the HUPM upon completion. The plan shall be reviewed with each project team member and worker as part of the orientation process, at a minimum. Where the plan is changed or updated, it shall be reviewed with all project staff and workers.

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VIII. Employee Involvement Plan

A. The **General Contractor** shall ensure the active participation of project management and staff, subcontractor management, staff, and labor forces, and labor force representatives.
B. For projects greater than $25,000,000 in value, the **General Contractor's Project Manager** and **Project Safety Manager** shall establish a Project Safety Committee. The Safety Committee shall consist of representation by the following, at a minimum:
   1. The general contractor **Project Manager**;
   2. The general contractor **Project Safety Manager**;
   3. Trade stewards (one per each trade);
   4. Tradesmen (at least one per each contractor on the project). The tradesman shall either be selected voluntarily by the employer, or where volunteers are not provided, shall be selected by the employer;
   5. Contractor **Safety Representatives**, where required by this Exhibit.
C. The Safety Committee shall meet no less than once per month. The Safety Committee meeting shall be coordinated and chaired by the **Project Safety Manager**, and the meeting shall be documented. The meeting shall consist of the following, at a minimum:
   1. Review of incidents and accidents from the previous month, including corrective actions and responsibilities;
   2. Review of upcoming project operations and activities;
   3. Review of the current project safety performance (incident rates, SafetyNet, etc.);
   4. Communication of Safety Bulletins from the previous month;
   5. Participation by the attendees where project hazards observed by the attendee are discussed and reviewed;
   6. Participation by the attendees regarding feedback from the tradesmen;
   7. A project walkthrough focused on identification of best practices and non-compliant conditions and practices.
D. The minutes from the Safety Committee meeting shall be distributed to the each attendee, each project **Contractor**, and the HUPM.
E. The general contractor **Project Manager** or **Project Safety Manager** may elect to establish other employee participation programs in addition to the Safety Committee. These may include anonymous employee suggestion boxes, recognition programs, etc.

IX. Project Hazard Analysis

A. The General Contractor is required to develop a Project Hazard Analysis (PHA) prior to commencement of work. The PHA shall identify the following: major hazards anticipated as they relate to the scope of work (these shall be broken down by either project phase or by contractor), methods the **General Contractor** will employ to manage/mitigate/abate/reduce the hazards, and the responsibility for each of the management/mitigation/abatement/reduction techniques.
B. The PHA shall be submitted to the HUPM upon completion.

X. Project Inspections

A. It is ultimately the responsibility of the general contractor's **Project Manager**(s), **Project Superintendent**(s), and **Project Safety Manager**(s) to assure safe working conditions and practices are employed at the project. At a minimum, walkthrough-type inspections shall be conducted at prescribed frequencies, dependent upon the role of the individual.
B. Formal inspections shall be documented by the inspector using inspection software, where applicable (detailed below), written reports, and photographs. Following each inspection, communications shall be made to the responsible parties/**Contractors**, and the documentation shall be forwarded. Where projects are not required to comply with the Predictive Solutions requirements (e.g. < $25,000,000 volume), inspections shall be conducted and documented by other suitable means.

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C. Where life-threatening conditions or practices are observed, the observer has the obligation to cease the activity or practice until such time as corrective measures are implemented. Where life-threatening conditions or practices are observed, the observer shall contact the **Project Safety Manager** following the observation. Work may not resume until the **Project Manager**, **Project Safety Manager**, contractor manager/**Superintendent**/**Foreman**, and responsible person have agreed to and completed the corrective action(s).

D. Where life-threatening or high-severity hazards are identified by either the owner or the **General Contractor**, the non-compliant **Contractor** shall complete a Non-Compliance Corrective Action Plan. The intent of this requirement is to identify the (1) highlight the seriousness of the observation to management, (2) identify the root cause of the incident, (3) identify and implement corrective action(s), and (4) involve the **Contractor's** management in the process.

E. Harvard University utilizes safety inspection software and database system developed and maintained by Predictive Solutions - SafetyNet. The software program involves the field observation and collection of data, data entry into a handheld device or computer, and synchronization of the data with the Predictive Solutions website. The information is then used to communicate with responsible parties and forecast trends that develop as data is collected.

F. The **General Contractor** for each project with greater than $25,000,000 in volume will be required to purchase and use the software. The contract purchased with Predictive Solutions will then be based on project duration. For estimating purposes, assume the following:
   1. Six months to one year: $8,400. This contract includes set-up, training, and use of the software for up to four (4) users. This contract does not include provision of the handheld devices for data input. The contractor shall purchase at least one handheld device (Blackberry-type phone or Pocket PC) for use with Predictive Solutions.
   2. One year to three years: $13,200 per year. This contract includes set-up, training, and use of the software for up to eight (8) users. This contract does not include provision of the handheld devices for data input. The contractor shall purchase at least one handheld device (Blackberry-type phone or Pocket PC) for use with Predictive Solutions.
   3. Three years or greater: $19,800 per year. This contract includes set-up, training, and use of the software for up to twelve (12) users. This contract does not include provision of the handheld devices for data input. The contractor shall purchase at least one handheld device (Blackberry-type phone or Pocket PC) for use with Predictive Solutions.

G. Each contract purchased with Predictive Solutions will include the initial project set-up, initial training by Predictive Solutions, and access to the information databases, specific to that project.

H. For **General Contractors** that have an existing, company-wide contract with Predictive Solutions for SafetyNet, the **General Contractor** shall allow 'zone-sharing' between Harvard and the **General Contractor**, specific to individual projects only. The cost for this shall be borne by the **General Contractor.**

I. To establish the contract for SafetyNet, contact Predictive Solutions through **http://predictivesolutions.com** or at (800) 991-3262, mentioning specifically that this contract applies to Harvard University work.

J. Inspections shall be conducted as follows:
   1. General Contractor **Project Manager**: One inspection per month.
   2. General Contractor **Project Superintendent**: One inspection per week.
   3. **Project Safety Manager**: One inspection per day (>$25,000,000 contract volume) or one inspection per week (<$25,000,000 contract volume)

K. For projects utilizing SafetyNet, all safety-related observations by the **Contractor** must be collected in electronic form by each individual safety inspector and entered into a single database using a system (the "Safety System") that enables HUEH&S and the HUPM to view and analyze all observations collected on a daily basis, to remotely monitor and evaluate each **Contractor's** and each individual inspector's participation in the safety program, to change inspection requirements and to communicate safety alerts to all inspectors and **Contractors** no less frequently than daily. The Safety System must further enable each **Contractor** to compare its own safety observations with all others on the project on a real-time basis, must

utilize hand-held or mobile devices for the collection of observations or inspection data and uploaded no less frequently than daily, and must ensure the privacy and security of all data collected in accordance with industry best practices.

XI. Reporting

A. The **General Contractor** shall compile and/or prepare all reports associated with incidents or injuries occurring on or related to the project. The preparation of reports may be the responsibility of another employer or **Contractor**, but shall be overseen and distributed by the **General Contractor**.
B. Incident/injury reports include the following:
   1. Commonwealth of Massachusetts Department of Industrial Accidents – MA101 Employer's First Report of Injury;
   2. OCIP (or other insurance company) Claims Reports (Worker's Compensation, General Liability, Auto Liability, Builder's Risk, Property, etc.)
   3. The Harvard Construction Supervisor's Incident/Accident Investigation Report may be used to satisfy this documentation requirement);
C. All incident/accident/injury reports shall be sent to the required insurance company, per their policy guidelines, with copies of the reports distributed to the HUPM or his designee for the project files.
D. Each **Contractor** shall submit a Monthly Safety Report, specific to the project, through a Harvard-sponsored, web-based program (CSAP). This Monthly Safety Reporting program can be accessed through **www.uos.harvard.edu/ehs/construction**.
E. The Monthly Safety Report contains the following information:
   1. Summary of accidents/incidents from the previous month;
   2. The number of man-hours worked during the previous month;
   3. Summary of accountability actions (safety violations, dismissals, and fines issued);
   4. Project events and inspections.
F. The Monthly Safety Report shall be issued no later than the first (1^{st}) Friday of the month, for the previous month's activities.

XII. Safety Representation/Project Coverage

A. Any project valued at greater than $25,000,000 will be required to provide a full-time, dedicated **Project Safety Manager**. This person may not hold other duties. The **Project Safety Manager** shall have a minimum of seven (7) years experience in construction safety, shall possess the OSHA 30-Hour Construction Safety Outreach Training, and shall hold a current certification in First Aid and CPR. The **General Contractor** shall submit the resume of the **Project Safety Manager**, for review, to the HUPM and HUEH&S (and Program Safety Director if OCIP) prior to commencement of construction operations. The resume shall include at least three (3) references from an owner or developer.
B. Any project valued at less than $25,000,000 where high-hazard activities requires that a safety professional participate in the planning for the operation(s), and conduct an documented inspection of the operation at least daily. The minimum qualifications for the safety professional shall be those outlined in J.1 above.
C. Any project valued at less than $25,000,000 will be required to designate a **Project Safety Manager.**
D. The Owner reserves the right to require the General Contractor to provide additional Safety Representatives dependant upon the size and scope of the project.
E. Each **Contractor** shall designate at least one person to serve as **Safety Representative**.
F. The **Project Safety Manager** and **Safety Representative** shall be on site on a full-time daily basis from the time of mobilization onto the project, through the completion of the final punchlist. Coverage shall be provided during all project activities, including after-hours work and weekends.
G. Any potential relief from the requirements outlined in this section shall be made on a case-by-case basis through consultation with the **HUPM** and the Harvard University EH&S Construction Services Group Manger. The request for relief from the **General Contractor** or **Contractor** shall be in writing, and shall document the reason(s) that relief is being sought.

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XIII. Safety Meetings

A. Annual Program Evaluation and Improvements Plan Meeting
   1. Each project shall hold a Program Evaluation and Improvements Plan Meeting at least once per year. The meeting shall be conducted in accordance with Section IV of this Exhibit.

B. High Hazard Planning Meeting
   1. Prior to commencement of each high hazard operation conducted on the project, the **General Contractor** shall coordinate and chair a High Hazard Planning Meeting.
   2. The general contractor's **Project Manager**, **Project Safety Manager**, **General Superintendent**, and **Area Superintendent** (if assigned), the subcontractor's **Project Manager**, **Safety Representative**, and **Foreman** shall attend this meeting. The HUPM and HUEH&S shall be invited to attend this meeting.
   3. At a minimum, the following activities/operations require that a High Hazard Planning Meeting be held:
      a. Critical Lifts
      b. Energized Electrical Work
      c. Hazardous Waste Remediation or Abatement
      d. Leading Edge Work
      e. Precast Concrete Erection
      f. Scaffold Erection
      g. Steel Erection (meeting shall also comply with 29CFR Part 1926.752)
      h. Structural Demolition
   4. The High Hazard Planning Meeting shall address the policies, procedures, coordination, communication, and training that will be required or employed during the activity. The meeting shall be documented, and meeting minutes shall be distributed by the **General Contractor** to all attendees.

C. Monthly Management Safety Meeting
   1. The general contractor **Project Manager** and **Project Safety Manager** shall coordinate and co-chair a Management Safety Meeting at least once per month.
   2. The following persons shall attend the meeting:
      a. General Contractor **Project Manager**
      b. General Contractor **Project Safety Manager**
      c. General Contractor **Project Superintendents**
      d. Subcontractor **Safety Representatives**
      e. Subcontractor **Foremen** and **Competent Person**
      f. Union Stewards (where applicable)

      The HUPM and HUEH&S shall be invited to attend the Monthly Management Safety Meeting.
   3. The following shall be reviewed at the Monthly Management Safety Meeting:
      a. Review of incidents and accidents from the previous month, including corrective actions and responsibilities;
      b. Review of upcoming project operations and activities – pre-planning;
      c. Review of the current project safety performance (incident rates, SafetyNet, etc.);
      d. Communication of Safety Bulletins from the previous month;
      e. Training and discussion on a special safety topic, pertinent to the project.
   4. The meeting shall be documented, and meeting minutes shall be distributed by the **General Contractor** to all attendees. Each **Contractor** shall use the minutes of the meeting to conduct a tool box talk with their respective employees.

D. Monthly Mass (All Hands) Safety Meeting
   1. The general contractor's **Project Safety Manager** shall coordinate and chair a Mass Safety Meeting at least once per month. This meeting may be held in the field or in a room large enough to safely hold the number of attendees. This meeting is expected to be concise and brief.
   2. All project **Employees**, staff, and management shall attend this meeting. The HUPM and HUEH&S shall be invited to attend the Monthly Mass Safety Meeting.

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3. The following shall be reviewed at the Monthly Mass Safety Meeting:
   a. A brief review of incidents and accidents from the previous month, including corrective actions and responsibilities;
   b. Distribution of Safety Bulletins from the previous month;
   c. A brief training session on a special safety topic, pertinent to the project.
4. A meeting outline shall be distributed to each attendee at the meeting. Where comments or suggestions are provided by an attendee during the meeting, the suggestion/comment shall be documented and addressed.

E. Monthly Safety Committee Meeting
1. Each project greater than $25,000,000 in volume shall hold a Safety Committee Meeting at least once per month. The meeting shall be conducted in accordance with Section VII of this Exhibit.

F. Owner/Architect/Contractor (OAC) Meeting
1. On projects where OAC meetings are held, the attendees shall be briefed on the status of the project safety program, including milestones, achievements, injuries and incidents, and upcoming activities by the general contractor **Project Manager** or **Project Safety Manager**. It is advantageous to the efficiency of the meeting that safety be the first topic discussed.

G. Pre-Construction Safety Meeting
1. The **General Contractor** shall coordinate and chair a Pre-Construction Safety Meeting for each **Contractor** (of all tiers) working on the project. This meeting shall be held at least two (2) weeks prior to the commencement of the work by the **Contractor**.
2. The following persons shall attend this meeting:
   a. General Contractor **Area Superintendent**
   b. General Contractor **Project Safety Manager**
   c. Subcontractor **Project Manager**
   d. Subcontractor **Superintendent**
   e. Subcontractor **Foreman** and **Competent Person**
   f. Subcontractor **Safety Representative**
3. The Pre-Construction Safety Meeting shall review and address the following:
   a. **Competent Person** Requirements
   b. Coordination and logistics
   c. Electrical Safety
   d. Emergency Response Procedures and Meeting Locations
   e. Environmental Requirements
   f. Equipment Inspections
   g. Fall Protection Requirements and Practices
   h. Fire Prevention and Protection Requirements and Practices
   i. High-hazard activities
   j. Housekeeping Requirements
   k. Incident/Accident reporting procedures
   l. Insurance Requirements
   m. Major Requirements of this Exhibit (applicable to the **Subcontractor**)
   n. Material Deliveries and Storage
   o. MSDS Locations and Program Requirements
   p. Pre-Qualification Requirements
   q. Project Disciplinary Action Requirements
   r. Project Goals
   s. Project Safety Representation/Coverage
   t. Public Protection Requirements and Practices
   u. Recordkeeping
   v. Safety Meetings
   w. Subcontractor's general scope of work
   x. Submittals required by the **Subcontractor** (HASP, **Competent Person**, HazCom, etc.)

y. Substance Abuse Program Requirements
z. Training

4. The meeting shall be documented, and meeting minutes shall be distributed by the **General Contractor** to all attendees.

H. Weekly Coordination and Safety Meeting

1. On projects where Weekly Coordination Meetings (often referred to as **Foremen**'s Meetings) are held, the attendees shall be briefed on the status of the project safety program, including milestones, achievements, injuries and incidents, and upcoming activities by the general contractor **Project Manager** or **Project Safety Manager**. It is advantageous to the efficiency of the meeting that safety be the first topic discussed.

XIV. Training

A. General Requirements

1. Training requirements shall comply with 29CFR Part 1926.21, other applicable requirements, and the requirements of the Harvard Construction EH&S Standard, at a minimum.
2. Training of employees is ultimately the responsibility of the employer.
3. Each employer shall maintain records of training, and these records shall be produced upon request. Where employees demonstrate an inadequate level of the training or understanding, the **General Contractor** shall require the employer to conduct additional training.
4. All **Employees** on University Projects shall possess an OSHA 10-Hour Construction Safety Outreach Training card. Training cards will be presented during the orientation, and copies made. **Employees** without this certification will have 30 days from the date of his or her initial entry to undergo this training and produce the training card.
5. All **Supervisors**, **Foremen**, and **Safety Representatives** on University Projects shall possess an OSHA 30-Hour Construction Safety Outreach Training card. Training cards will be presented during the orientation, and copies made. **Supervisors**, **Foremen**, and **Safety Representatives** without this certification will have 30 days from the date of his or her initial entry to undergo this training and produce the training card.

B. Orientation

1. The **General Contractor** shall develop a Safety Orientation Program, specific to the project. The Safety Orientation Program shall address and review the following items, at a minimum:
   a. Project Safety Goals
   b. Aerial Lift Use Requirements
   c. **Competent Person** Instructions
   d. Confined Space Permit and Procedures
   e. Lock-Out/Tag-Out Requirements
   f. Electrical Safety
   g. Emergency Response Procedures
   h. Environmental Requirements
   i. Equipment Inspection and Safety
   j. Excavation Requirements
   k. Fall Prevention and Protection Requirements
   l. Fire Prevention and Protection Requirements
   m. Hazard Communication and Container Labeling
   n. Housekeeping Requirements
   o. Incident/Accident Procedures and Reporting
   p. Project Disciplinary Action Program
   q. Safety Inspection Criteria
   r. Personal Protective Equipment Use and Limitations
   s. Public Protection
   t. Safety Management Systems Requirements and Practices

Construction Environmental Health and Safety Exhibit:
SAFETY MANAGEMENT SYSTEMS

u. Scaffold Requirements
v. Signs, Signals, and Barricades Requirements
w. Substance Abuse Policy Guidelines
x. Training Requirements (OSHA 10/30, etc.)

2. Each employee entering the project shall undergo the Safety Orientation within twenty-four (24) hours of entry onto the project.
3. Each employee who has undergone the Safety Orientation shall receive a sticker for the placement on the outside of the hardhat that clearly identifies satisfactory completion of the Orientation. In addition, each employee shall receive a copy of the orientation for their records and use.
4. The **General Contractor** shall maintain a log of all persons who have undergone the Safety Orientation, including the name, signature, date, and trainer's name.

C. Pre-Task Planning
1. For each task or operation undertaken at the project, the **Competent Person** or **Safety Representative** for each **Contractor** shall compile a PTP.
2. The PTP shall break down the operation or task into basic job steps, shall identify the hazards associated with each job step, and shall identify the hazard control measures associated with each hazard. The PTP shall also include a checklist of major items to be addressed in every PTP. The Harvard Example Pre-Task Plan Form may be used to satisfy the documentation for this requirement.
3. Following completion of the PTP, and prior to commencement of the task or operation, the PTP must be submitted to the general contractor's **Area Superintendent** and **Project Safety Manager** for review, comment, and approval.
4. The approved PTP shall be used to conduct a Pre-Task Plan Meeting with the employees who will perform the work covered under the PTP, and shall be conducted in the field by the **Competent Person** or **Foreman**. Each attendee shall be instructed as to the requirements listed in the PTP, and shall acknowledge this training by signing the PTP.
5. The PTP will be amended and resubmitted where the operation or job steps change. Where changes are made and approved, the Pre-Task Plan Meeting shall be conducted again.
6. The PTP shall be posted in the immediate work area, and shall be produced upon request.