Construction & Renovations

As the University moves into our summer construction/renovation season, we wanted to provide you with some key reminders related to Environmental Health and Safety (EH&S) requirements associated with construction and renovation activities.

This list is not intended to be exhaustive but will highlight some of the most significant (and, at times, overlooked) EH&S considerations/requirements to help ensure that your projects are completed safely and on time and budget. This reminder is primarily focused on non-capital sized projects although most of the same information applies to larger capital projects. We recommend that after your review, you share this reminder (in part or whole) with your Harvard and/or 3rd party Project Managers and Contractors prior to construction activities during the project planning phase.

- **Hazardous Material Assessments** – Prior to any construction activity, ensure that you conduct a hazmat assessment to identify hazardous building materials (e.g. asbestos, lead, etc.). Strict regulations exists across multiple federal, state and local agencies stipulating notification, abatement and disposal methodologies and many of these regulations have changed over the past several years.  
  *Please Note: Do not allow any sampling/testing for Polychlorinated Biphenyls (PCBs) without first contacting EH&S*.  
  **Reference**  

- **Demolition Permit – AQ-06** – The Massachusetts Department of Environmental Protection (MassDEP) requires that permits be filed with the state 10 business days prior to any renovation/construction/demolition activity that will disturb or impact building materials.  
  **Reference**  
  Guidelines for Demolition Abatement:  
  [http://ehs.harvard.edu/programs/asbestos-operations-maintenance](http://ehs.harvard.edu/programs/asbestos-operations-maintenance)

- **Hazardous Materials Abatement** – The University has vetted a number of specialty contractors and consultants, waste haulers and disposal facilities for your use. These contractors have been identified as meeting the specific needs of the University based on their skills, ability, understanding of operating at Harvard and have strong relationships with the University.  
  **Reference**  
  Approved Contractors and Consultants – Asbestos:  
  [http://ehs.harvard.edu/system/files/Approved_Asbestos_Contractors_and_Consultants_0.pdf](http://ehs.harvard.edu/system/files/Approved_Asbestos_Contractors_and_Consultants_0.pdf)

- **Pest Control** – Adopt and abide by the Harvard Construction Integrated Pest Management Standard for all capital projects, as well as, for minor renovations. Renovation activities reveal existing and create new penetrations in building envelopes and interior partitions that **must be sealed to exclude and contain rodent and insect pests**.
Seasonal Communication

- **Pest Control (Continued)** Similarly, abandoned and damaged drain lines may serve as thoroughfares for pests, and these must be permanently capped. Operational practices during construction must be followed to secure foods and food wastes, and to keep doors and windows closed to prevent entry of pests.
  
  Reference
  https://www.ehs.harvard.edu/programs/pest-control

- **Hot Work Permits** – Welding and cutting operations taking place as part of a renovation/demolition or new construction project are required by the Massachusetts Comprehensive Fire Safety Code (527 CMR:1.00) to follow strict guidelines to protect against fires within your structures. Persons authorizing, conducting hot work and performing as a fire watch must be trained to be a “Qualified Person”. A Qualified Person, as by training, is defined by the State Fire Marshal’s Office. Permits for these operations are required to be obtained through the local fire department. The fire department may require a fire watch (detail) depending on the scope of work.
  
  Reference
  http://ehs.harvard.edu/programs/hot-work

- **Fire System Impairments and Alterations** – Many project activities require the impairment/alteration (shutdown, bagging, modification, removal, or addition) of fire detection and suppression systems, as well as, means of egress. The Commonwealth and local fire departments have strict requirements for the impairment or alteration of these systems. Detailed plans and permits are required for these system impairments/alterations. In some cases, fire watch (details) may be required by the local fire department.
  
  Reference
  http://ehs.harvard.edu/programs/fire-permits-compliance

- **Safeguarding Construction/Alterations/Demolition - NFPA 241** – A new requirement that address temporary construction equipment and storage; processes and hazards such as hot work, waste disposal, and explosive materials; utilities; fire protection; and safeguarding construction and alteration, roofing, demolition, and underground operations. Both the Cities of Boston and Cambridge are now requiring that renovation and construction projects comply with NFPA 241. Detailed written plans are required to be submitted to the cities prior to the issuance of building permits. Details of the plan will include waste removal, fire system impairments, means of egress planning, hot works activities and fire department access to your worksite.
  
  Reference

- **Dig Safe** - The purpose of the Dig Safe Law is to prevent damage to underground utilities. Dig Safe, Inc. ("Dig Safe") is a communication network that notifies utility companies about planned excavation projects. After an excavator notifies Dig Safe of a proposed project, member utility companies will physically go to the site of the planned excavation and mark the location of their underground facilities with paint or stakes.
Seasonal Communication

- **Noise/Vibration/Odor/Indoor Air Quality (IAQ) Complaints from Existing Occupants** – Many project related activities have the potential to create noise, vibration, odor and/or indoor air quality issues or concerns for occupants who remain in-place or reside adjacent to renovation activities. Nearly all of these issues can be avoided with careful planning, communication and, in some cases, monitoring prior to (and/or during) the renovation activities.
  
  Reference
  [https://www.ehs.harvard.edu/programs/indoor-air-quality-iaq](https://www.ehs.harvard.edu/programs/indoor-air-quality-iaq)

- **Service Contractor Safety Guide** – The Service Contractor Safety Guide should be provided to your service contractors or incorporated by reference in your contracts. This Guide outlines the University’s expectations for contractors to work safely and in compliance while on-site. The Guide not only protects the University’s employees, students, visitors and property but offers tools to assist the contractors in protecting themselves against workplace injuries.
  
  Reference
  [https://www.ehs.harvard.edu/programs/service-contractor-safety](https://www.ehs.harvard.edu/programs/service-contractor-safety)

- **Construction Safety Standard** – The University's Construction Safety Standard is applicable to all capital projects performed at the University and are excellent references for non – capital projects. This proactive standard is designed to provide contractors with a clear understanding of Harvard’s expectations for construction safety. Operations such as scaffolding, cranes & hoists, as well as, fall protection and adherence to the use of personal protective equipment are critical.
  
  Reference

As always, EH&S is available to assist you with any of your project-related EH&S concerns or questions. Please contact your school/department EH&S Designated Safety Officer (DSO). – a listing is provided at: [https://www.ehs.harvard.edu/sites/ehs.harvard.edu/files/ehs_designated_safety_officers_em_staff_lsa_assignments.pdf](https://www.ehs.harvard.edu/sites/ehs.harvard.edu/files/ehs_designated_safety_officers_em_staff_lsa_assignments.pdf)

Your Designated Safety Officer and all of us at EH&S are available to guide and assist you with your construction/renovation projects. We look forward to partnering with you for a successful and safe construction season.