

# SITE-SPECIFIC ENVIRONMENT, HEALTH & SAFETY (EH&S) PLAN

March 12, 2023

Draft

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Date

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Project Name

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Site Address

## **Introduction**

It is the responsibility of each contractor working on this project to implement, enforce and modify when necessary the safety policies and procedures identified here-in. Communication and training is an integral part of the program, and should be emphasized over the duration of the job. In order to facilitate the above, every employee on site shall follow the established policies and procedures, report hazardous conditions and mitigate "areas of concern" before an illness, injury, near miss or other incident is realized. Contractors as well as other persons on this site are obligated to follow the same rules and regulations that have been implemented for the contractors in accordance with the requirements of, but not limited to; the federal Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), the Massachusetts Departments of Environmental Protection (DEP), Department of Public Safety, Department of Labor and Workplace Development, and other applicable state and local regulatory requirements.

**The responsibility for the implementation, training and enforcement of this program rests with the;**

General Contractor: \_\_\_\_\_

Project Manager / Site Superintendent: \_\_\_\_\_

The goal of this program is to provide a healthy and safe working environment for everyone as well as to protect the site and the environment to the best of our ability. If a conflict is identified between the safety manuals of the general contractor, any subcontractor, or the owner, the most stringent requirement shall prevail.

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## **Scope**

The Site Specific EH&S Plan can and should be used (with applicable modifications) as a guide for projects at or above \$100,000.00, to assist the contractor and all sub-contractors working on the project. In order to facilitate “best management practices” for this project, the general contractor shall incorporate the most stringent rules and regulations of all on-site contractors and the owner into this program. It is expected that all hazardous conditions identified by personnel on site, a safety officer or a local, state and/or federal inspector will be corrected immediately, or referred to a supervisor for corrective action. The General Contractor through his/her designee shall be responsible for the enforcement of the rules, regulations and other applicable environmental, health and safety requirements on site, as well as the appropriate disciplinary action for non-compliance.

## **Primary Requirement**

The General Contractor shall make all personnel on site, including sub-contractors aware of this site-specific safety plan, and emergency action plan(s), prior to initiation of work. This notification shall include; site specific program content, special project concerns and hazards, owner modifications, the training requirements for the project, including the day and time of the “tool box” talks, the reporting of hazards, illnesses, injuries and “near-misses”, any dangerous or out-of-service equipment, and the location of all the plans, manuals, MSDS and JHA / JSA’s. All reports, including accidents, incidents, out-of-service equipment and other information related to this plan shall be submitted to the Project Manager/Site Superintendent for corrective action and distribution.

## **Disclaimer**

This document is to be used as a reference only for a Site-Specific Environmental Health and Safety Plan. Sections of this document may not be necessary for most projects and should be removed. Conversely, additional sections not covered here-in may need to be added. This plan was drafted to assist companies who are required to have a EHS Plan on site, and shall serve as a "guide", covering most construction/project related activities. All information within has been taken directly from the regulatory requirements of the local, state and federal codes and laws as well as from recognized (adopted) standards.

Contractors should review and modify this document accordingly to meet the requirements of the project, making sure to include all necessary information. Again, this is not an all-inclusive document, so contractors remain completely responsible for content, training and enforcement of all regulatory requirements.

- This plan is not to be used as a legal document. It is for training and reference only.
- This Site-Specific Safety Plan is a working document. Modifications shall be made by the user to properly reflect the site-specific job that this plan will be used on.

## **Definitions**

**Areas of Accountability:** Pre-designated area(s) normally located  $\geq 50'$  from the building / construction site, where a headcount is conducted after an emergency evacuation.

**Authority Having Jurisdiction (AHJ):** The regulatory agency, typically the city or town inspector charged with code compliance, as it pertains to the specific code.

**Barrier Protection:** Physical separation of adequate size and strength to prevent unauthorized access to an area, building, section of a building, excavation or space where persons and/or vehicles are excluded or protected.

**Competent Person:** The two most appropriate definitions, as it pertains to a site-specific safety plan are included here-in. A competent person could be either a technically qualified and trained individual for a specific task, such as a scaffold erector or a construction supervisor, or it could be an individual who has ability to recognize a hazard, and has the ability to promptly correct it.

- a person with the appropriate certification, knowledge, or who is a technically qualified and trained individual for a specific task, or a person who is capable of identifying existing hazards in the workplace, selecting the appropriate control strategy, and has the authority to take prompt corrective action to eliminate the hazards.

**Confined Space:** any space that meets the following 3 criteria:

1. Is large enough and so configured that an employee can bodily enter and perform assigned work.
2. Access doors and panels measuring as an example; 18" x 18", 2' x 2', 3' x 3' etc.
  - a. manhole(s)
  - b. Tunnels
  - c. Has limited or restricted means of ingress or egress, such as, but not limited to:
  - d. Boilers, ductwork, elevator hoist-ways, overheads and pits, excavations, pits, stacks, tanks, tunnels, vaults
3. Is not designed for continuous occupancy.

There are only two classifications for confined spaces;

**Non - Permit Required Confined Space(s):** Is a confined space that does not contain any known or potential hazards (atmospheric, mechanical or physical) that have the potential to cause serious illness, injury or death.

**Permit Required Confined Space(s):** A confined space that does contain one or more known or potential hazards that could pose a threat to the health and safety of the persons who will enter the space, and for which entry a permit is required. A permit required confined space has one or more of the following characteristics;

- hazardous atmosphere
- materials that could engulf / entrap the entrant / occupant
- has an internal configuration that could trap or asphyxiate the entrant / occupant
- has air, gas, steam or water under pressure
- has the potential for extremely high temperatures
- electrocution hazards
- greater than 1/2" of water or other fluid
- inadequate means of egress
- any other recognized health and/or safety hazard

**Contract:** an agreement between two or more parties for the doing or not doing of something specified.

**Contractor:** a person who contracts to furnish supplies or perform work at a certain price or rate. A written agreement between owners, contractors and their subcontractors.

- Contractors, unless specifically identified as General Contractor(s), shall include both general and subcontractors.

**Cross Laminated Timber (CLT)** – A prefabricated engineered wood product consisting of not less than three (3) layers of solid-sawn or structural composite lumber where the adjacent layers are cross laminated and bonded with structural adhesives to form a solid wood element.

**Employer:** a person or business (contractor and/or sub-contractor) that employs one or more people, esp. for wages or salary:

**Excavator:** any company or person, including the owner who performs an excavation

**Facility:** any building, pipe, underground enclosure such as a vault or manhole.

**Inspector:** a person from a local, state or federal regulatory agency who is on site for the purpose of inspecting for compliance.

Multiple Employer Worksite: is made up of:

- The Creating Employer: the employer that caused a hazardous condition that violates an OSHA standard.
- The Exposing Employer: an employer whose own employees are exposed to the hazard.
- The Correcting Employer: an employer who is engaged in a common undertaking, on the same work site, as the exposing employer and is responsible for correcting a hazard.
- The Controlling Employer: an employer who has general supervisory authority over the work site, including the power to correct safety and health violations itself or require others to correct them. Control can be established by contractor or, in the absence of explicit contractual provisions, by the exercise of control in practice.

**Mass Timber** – A category of framing styles typically characterized by the use of large solid wood panels used for floors, roofs and wall construction.

**Owner:** a person who owns; possessor; proprietor.

**Project:** a large or major undertaking, esp. one involving considerable money, personnel, and equipment.

**Trench:** a subsurface excavation > 3' in depth, and is ≤ 15' between soil walls, as measured from the bottom.

**This Site-Specific EH&S Plan is for;**

- Alteration
- Demolition
- New Construction
- Renovation

Building or Project Identification / Name - \_\_\_\_\_

Address - \_\_\_\_\_, City/Town - \_\_\_\_\_ State - \_\_\_\_\_

The **Use Group** for the above referenced building is;

**A- \_\_\_ B E F- \_\_\_ H- \_\_\_ I- \_\_\_ M R- \_\_\_ S- \_\_\_ U**  
Assign the appropriate number to the blank, and circle the appropriate letter designation.

The **Construction Type** for the above referenced building is;

**Type I A B      Type II A B      Type III A B      Type IV      Type V A B**  
Circle the appropriate "Type" and letter designation, if applicable

The building is \_\_\_\_\_ stories in height and \_\_\_\_\_ square feet in size

Project scheduled to begin \_\_\_ / \_\_\_ / \_\_\_ anticipated completion date \_\_\_ / \_\_\_ / \_\_\_



# I. EMERGENCY

## Emergency Action Plan

(29 CFR 1926.35)

**Fire Alarms** – All employees and visitors are required to evacuate the building or site in the event of a fire alarm, regardless of cause or time.

- For reasons of accountability, the General Contractor shall, before any work is initiated, identify specific **areas of accountability** for each contractor, trade or manageable group.
- Accountability areas shall be  $\geq 50'$  from the building.
  - It is the responsibility of the individual group, (by contractor, trade etc.), to determine whether or not all of their personnel evacuated the building, and if not, to report the names of the missing (or unaccounted person(s)) to the fire department incident commander, the local police/security department, and the project superintendent.

**Fire** – In the event of an actual fire or smoke condition, the previously identified (through training) procedures shall be followed: Notify all persons in the immediate area of the fire to initiate evacuation

1. **Close** the door to the fire area/room to contain the fire and/or smoke condition after everyone has left the area.
2. **Activate Alarm** (fire alarm, horn or other suitable warning device) to initiate building evacuation.
3. **Phone Police** or local Emergency Number (911) or (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_.
4. **Evacuate** the building or **Extinguish** the fire, if properly trained.

## **Medical Emergency**

(29 CFR 1926.50)

Emergencies (*which include significant lacerations, amputations, head, neck or back injuries, loss of consciousness, allergic reactions, diabetic emergencies, seizures, difficulty breathing, stroke and unknown illness or injuries*) shall require the response of an ambulance. **911** or the local emergency number;

(\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_.

Unless required for reasons of personal safety (such as explosion, fire, structural failure etc.), no person needing emergency first aid shall be relocated, as this may compromise their health, safety and well-being.

- A designated person shall be identified to meet the ambulance at a predetermined location, and direct the ambulance crew into the area or building where the incident has occurred.

### Emergency Equipment

(29 CFR 1926.50 (d))

- First Aid Kits, Fire Extinguishers and Air Horns shall be conspicuously placed by the Exit on each floor.
  - First Aid Kits shall be maintained by the project superintendent, or his/her designee.
  - At the above locations, the names of personnel on site with CPR and / or First Aid Training shall be posted.

### Illness and Minor Injuries

- All minor injuries and illness shall be reported to one of the following person(s) as soon as possible.

\* \_\_\_\_\_ - (\_\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

\* \_\_\_\_\_ - (\_\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

\* \_\_\_\_\_ - (\_\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

For minor injuries and illnesses, provided there has been no head or back injuries, loss of consciousness, difficulty breathing, significant bleeding, seizures, diabetic emergency, or decreased level of consciousness, a patient can be transferred to an approved medical facility by an authorized "trained" employee, in a company vehicle. *Minor injuries and illnesses might include flu-like symptoms or minor lacerations (less than 5 stitches).*

For this project, the Medical Treatment Facilities are;

Medical Facility: \_\_\_\_\_ Medical Facility: \_\_\_\_\_

Address: \_\_\_\_\_ Address: \_\_\_\_\_

City / Town: \_\_\_\_\_ City / Town: \_\_\_\_\_

Phone: (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_

- **Copies of the directions to the Medical Facility are located in**

\_\_\_\_\_

### **Incident and Accident Investigation, Reporting and Recordkeeping (29 CFR 1904 and 29 CFR 1926.22)**

The following are the reporting requirements for fatalities, hospitalizations, amputations and loss of eye(s);

Contact **OSHA** at **(800) 321-OSHA** or online at [www.osha.gov](http://www.osha.gov) for the following;

- **Fatalities** (one or more) within **8** hours
- **Inpatient Hospitalizations** (one or more) within **24** hours
- **Amputation or Loss of Eye(s)** within **24** hours

Emergency incidents should take precedence over all investigations, recordkeeping and reporting. Ill or injured employees should be provided with the most appropriate medical response for the incident, as soon as possible.

After the ill or injured employee has been provided with the most appropriate first aid care (ambulance, medical facility or on-site first aid), the supervisor or their designee shall initiate an incident investigation to correct hazards and prevent reoccurrence.

- An incident report, with as much information as possible should be completed within 24 hours.
  - Additional information can be added to the reports, as it becomes available, and when the injured or ill employee has returned to work or is capable of providing the necessary information.
- OSHA requires employers to maintain accurate records of work-related illnesses, injuries and deaths.

- Only "recordable" illnesses and injuries (see below) shall be entered on the OSHA 300 Log. A recordable illness or injury includes one of the following:
  - Fatality
  - ≥ 1 lost work day(s)
  - Transfer to another job
  - Loss of consciousness
  - Medical treatment, other than normal 1st aid
  - Job restrictions
  - Restriction of motion (ergonomics)
  - Occupational illness (diagnosed)

The Project Superintendent shall correct all identified hazards immediately, and prevent reoccurrence of the incident and (when necessary) go over the incident and the corrective actions with the project supervisors and/or the employees.

It is the responsibility of the General Contractor to develop a site specific emergency evacuation plan with procedures and emergency equipment placement for every project.

- An example of an emergency action plan is located in the appendix section at the end of the document.

### **All Hazards Plan**

It is the responsibility of the General Contractor to identify other potential emergencies that could occur on site. An All Hazards Plan is a regulatory requirement that indicates the contractor considered other risk factors on the project, and that they are initially prepared to respond to the incident.

The All Hazards Plan should include events that are likely to occur on the project or site, such as floods, high winds, potential falls, structural collapse and environmental emergencies.

The contractor must be prepared for, and be able to notify (in an approved manner) the entire work site about the emergency and the proper evacuation or procedural protocols.

- The site is required to have at least 2 separate and distinct means of notification, **one** for **Fire** and another for "other" emergencies.
  - Examples of incidents that are likely to occur on this construction project include, but are not limited to;

- Asbestos Exposure** Contact: \_\_\_\_\_ (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_
- Bomb Threat** Contact: \_\_\_\_\_ (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_
- Building Collapse** Contact: \_\_\_\_\_ (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_
- Chemical Incident** Contact: \_\_\_\_\_ (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_
- Death** Contact: \_\_\_\_\_ (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_
- Elevator Emergency** Contact: \_\_\_\_\_ (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_
- Explosion** Contact: \_\_\_\_\_ (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_
- Flood** Contact: \_\_\_\_\_ (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_
- Gas Leak (LNG/LPG)** Contact: \_\_\_\_\_ (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_
- Haz-Mat Incident** Contact: \_\_\_\_\_ (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_
- Health Related Issue** Contact: \_\_\_\_\_ (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_
- High Wind (ex:Tornado)** Contact: \_\_\_\_\_ (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_
- Mold / Mildew** Contact: \_\_\_\_\_ (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_
- Motor Veh. Accident** Contact: \_\_\_\_\_ (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_
- Pest Infestation** Contact: \_\_\_\_\_ (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_
- Sewer Backup** Contact: \_\_\_\_\_ (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_
- Workplace Violence** Contact: \_\_\_\_\_ (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_

The above checklist serves as a guide for potential emergency situations that have the possibility of occurring on the project site, with a reference contact. It is the responsibility of the General Contractor to establish an appropriate response protocol for each emergency situation that could take place on site.

- The General Contractor shall provide copies of the plans to all subcontractors and shall be responsible for all test procedures.
- All Contractors on site shall follow the "Emergency Action Plan" and "Evacuation Routes", specified by the General Contractor.

## **Accountability**

It is the responsibility of the General Contractor to identify the best possible accountability system for the construction site, and to determine (in advance) a meeting point for all employees on site.

- In case of emergency, such as a fire, location(s) outside of the building shall be identified for the contractors. The location(s) can be separated by sub-contractor(s), trade, or it could be all-inclusive, provided the person in charge could account for each employee. A checklist could be utilized for this purpose, but the form/list must take into consideration;
  - Illness
  - Meetings
  - Vacation
  - Other conditions for which the employee may be off-site.

## **Means of Egress**

All means of egress within the area or building shall be properly maintained for health and safety reasons.

- Personnel must be able to enter and exit the area, building or facility without hazard.
- All corridors and other walk / work surfaces shall be free of accumulated dust(s) and waste.
- Boxes, cardboard and other combustible material shall be kept to a minimum to reduce the risk of fire.
- Cords and other potential trip hazards shall be run along the base of the wall or overhead.
  - Cords run overhead shall not be run above ceilings, ceiling grids or through walls.
  - Cords run overhead should be hung by non-metallic means such as rope, string or tape.
- Corridors shall not be used for the storage or placement of gases.
  - Combustible storage should be placed in a separate area or room, in case of fire.
  - Equipment should be properly stored to prevent trip and fall, and for ease of retrieval.
- Flammable Gas and Liquid storage shall be kept to a minimum, and shall be stored in a manner acceptable to the owner and the local fire department.

- Flammable gasses and liquids shall not be placed or otherwise stored in a “means of egress”, such as a corridor or exit.
- Flammable and combustible liquids shall be placed in approved metal (self-closing) cans and Flammable Storage Cabinets.
- All floors, unless otherwise permitted by the Building Official, shall have (2) separate and distinct means of egress.
  - If a stairwell must be removed, or temporarily made inaccessible, it shall be the responsibility of the General Contractor to create another means of emergency egress, which could include, but is not limited to;
    - Ladders to lower floor or ground
    - Access to scaffold/staging
  - Whenever an Exit is temporarily closed or relocated, the general contractor shall make the following site modifications;
    - Cover or remove any reference to the existing signage
    - Post exit signage at the new location and
    - Direct employees and visitors to the new or temporary exit, as required

All means of egress must be properly identified, as required by the building official and OSHA. At a minimum the EXIT sign must be;

- Green or Red in color
- Exit sign letters shall be not less than 6” with at least a ¾” stroke
- At least 2’ above the floor
- Easily recognizable
- All **EXIT** signs that no longer serve an actual exit, must...
  - be covered to prevent confusion, and
  - shall have alternative exit signage (with arrows) in place to re-direct occupants to the new exit.
- Lighting is the responsibility of the general contractor, or their identified designee. Adequate illumination must be maintained at all times for reasons of safety.
- Emergency lighting is required in areas where work may be necessary at night, or in locations below grade, in cases of power failure
- All temporary lighting must have the appropriate guards, as required
- The wattage of the light bulbs shall not exceed the manufacturers specifications for the light fixture

# II. ENVIRONMENTAL

## Hazardous Materials / Waste

310 CMR 30

- The General Contractor shall make the owner or the owner’s designee/representative aware of any hazardous materials found on site that were not previously addressed or identified at the beginning of the project.
- The General Contractor shall notify the owner or the owner’s designee/representative about any hazardous material incidents on site, regardless of size or quantity.
  - Leaks, spills or other types of contamination to air, soil or water which include chemicals, gasoline, hydraulic fluids and oils must be reported immediately
    - If the leak or spill is a “reportable quantity” of a chemical, gas or oil (> 10 gallons), spilled directly to water regardless of quantity, or spilled to a direct pathway to water (i.e. storm drain), the owner or the owner’s designee / representative must be notified, the local fire department and/or the Massachusetts Department of Environmental Protection shall be notified.
  - Hazardous materials shall be contained and labeled in a manner acceptable to the authority having jurisdiction.
  - Hazardous materials shall be properly labeled, as referenced in the Hazard Communications section of this program.
  - Hazardous Materials, including paints, adhesives, etc... shall not be left on site, even after a project completion, unless specifically permitted by the owner.

**For this project, all hazardous material incidents shall be reported to;**

\_\_\_\_\_ (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

Name

Owner / Company

Telephone Number

Hazardous materials including chemicals, cleaning agents, including those used for power washing of buildings and oil shall not be discharged or disposed of; to driveway, ground, road, sewer, storm drain or trash / waste receptacle or any other non-approved manner.



- The General Contractor shall identify, with appropriate environmental assistance, the most appropriate manner in which to properly discard the hazardous material or waste, in accordance with the requirements of the state and federal environmental protection requirements.
  - For additional information and regulatory requirements, see the following sections;
    - Hazardous Waste
    - Solid Waste and Recycling
    - Storm Water
    - Universal Waste

**Hazardous Waste**

The owner is ultimately responsible for the disposal and record keeping requirements of hazardous waste generated from the owner's site and processes, such as lead based paint, contaminated materials, and chemicals present at the facility. The General Contractor is responsible for any waste they create on their site that is unrelated to the owner, such as cutting oil, etchant and concrete cleaners, cleaning compounds, solvents. The General Contractor in cooperation with the owner, shall determine how all hazardous waste will be disposed of before, during and after project completion.

- The owner is responsible for signing any and all shipping papers related to the owner's hazardous waste.
- The General Contractor is solely responsible for their hazardous waste. This waste must be shipped with the General Contractor as the generator under their EPA Identification number. The owner will take no responsibility for the General Contractor's waste.

**For this project all hazardous waste disposal and shipping shall be reported to;**

\_\_\_\_\_ (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_  
 Name Company Cell Phone #

All hazardous waste on site (including asbestos, chemicals, gasoline, lead paint, oils etc.), shall be;

- be properly labeled with name of material and the appropriate hazard (corrosive, flammable, reactive or toxic)
- be properly capped or covered (tight-fitting) to prevent air evaporation or potential spillage

- be placed in adequate secondary containment, in case of leak or other accidental discharge
  - secondary containment shall be labeled “**Hazardous Waste**”
- The General Contractor shall be responsible for the inspection of the Hazardous Waste Site
  - All hazardous waste shall be disposed of in a manner approved of by the owner.
    - Hazardous Waste shall not be left on site, even after job completion.

**For additional information on Hazardous Waste Regulations, go to <http://www.mass.gov/dep/service/regulations/310cmr30.pdf>**

## **Recycling and Solid Waste**

### **Solid Waste**

**310 CMR 19**

The following materials are no longer permitted for disposal in Combustion Facilities, Landfills and Transfer Stations in accordance with 310 CMR 19 and 310 CMR 30.

It is the responsibility of the General Contractor for the project to verify proper disposal and to inspect for same.

- Appliances**
  - appliances employing electricity, oil, natural gas or liquefied petroleum gas to preserve or cook food; wash or dry clothing, cooking or kitchen utensils or related items; or to cool or to heat air or water.
  - For purposes of the waste bans, white goods include, but are not limited to, refrigerators, freezers, air conditioners, water coolers, dishwashers, clothes washers, clothes dryers, gas or electric ovens and ranges, and hot water heaters. White goods do not include microwave ovens.
- Asphalt Pavement, Brick and Concrete**
  - asphalt pavement, brick and concrete from construction activities and demolition of buildings, roads and bridges and similar sources.
- Batteries**
  - Batteries including but not limited to dry cell, lead-acid, lithium hydride, NiCad used in motor vehicles, power tools or stationary applications
- Cardboard and Paper Recycling**
  - all paper, corrugated cardboard, and paperboard products, except tissue paper, toweling, paper plates and cups, wax-coated corrugated cardboard, and other low-grade paper products.

- Cathode Ray Tubes**
  - any intact, broken, or processed glass tube used to provide the visual display in televisions, computer monitors and certain specific instruments such as oscilloscopes.
- Glass Containers**
  - glass bottles and jars (soda-lime glass) but excluding light bulbs, Pyrex cookware, plate glass, drinking glasses, windows, windshields and ceramics.
- Leaves and Yard Wastes**
  - deciduous and coniferous leaf deposition.
- Metal**
  - ferrous and non-ferrous metals derived from used appliances, building materials, industrial equipment, transportation vehicle, and manufacturing processes.
- Metal Containers**
  - aluminum, steel or bi-metal beverage and food containers.
- Polymer Plastics**
  - all narrow-neck plastic containers where the diameter of the mouth of the container is less than the diameter of the body of the container. This includes single polymer plastics containers labeled 1-6.
- Soil(s)**
  - Massachusetts Department of Environmental Protection (MassDEP) has strict requirements for the disposal and transfers of soils.
- Tires**
  - a continuous solid or pneumatic rubber covering intended for use on a motor vehicle. Shredded tires, defined as tires that have been cut, sliced or ground into four or more pieces such that the circular form of the tire has been eliminated, can be landfilled.
- Wood**
  - treated and untreated wood, including wood waste.
    - “Wood waste” is defined in the solid waste regulations as follows: Wood waste means discarded material consisting of trees, stumps, and brush, including but not limited to sawdust, chips, shavings, and bark. Wood waste does not include new or used lumber or wood from construction and demolition waste and does not include wood pieces or particles containing or likely to contain asbestos, chemical preservatives such as creosote or pentachlorophenol, or paints, stains or other coatings.
- Yard Waste**

- deciduous and coniferous seasonal deposition (e.g., leaves), grass clippings, weeds, hedge clippings, garden materials, and brush 1" (one) or less in diameter (excluding diseased plants).

For additional information and regulations on Solid Waste Regulations, see

<http://www.mass.gov/dep/service/regulations/310cmr19.pdf>

## **Stormwater**

## **310 CMR 10**

All construction sites greater than 1 acre in size, or are part of a larger construction site, shall have Storm Water Plan (SW3P) in place, as required by the state Department of Environmental Protection and the Federal Environmental Protection Agency. The General Contractor must also file a Notice of Intent (NOI) to use the Construction Multi Sector General Permit on the EPA's website. The Stormwater Plan and the Notice of Intent must be completed prior to any soil disturbance. Upon completing construction on the site, the General Contractor must file a Notice of Termination (NOT) with the EPA.

- As part of this requirement, all construction sites shall have a storm water protection plan to limit the discharge of construction materials, waste, including chemicals, cleaning materials, mud and sand into a storm drain and other "navigable" waterways.
  - *Navigable - any location (wetland) that has the potential to have water  $\geq 1$  month/year.*
    - The General Contractor is responsible for storm water protection on the site, and shall have designated a **storm water manager** for the duration of the project to monitor and correct the potential problematic discharge.
    - The storm water program, because it applies to ground water and water run-off must take into consideration all potential wastes leaving the construction site.
      - Acid or power washing of buildings must be controlled in a manner acceptable to the DEP / EPA
      - Areas for the washing of vehicles and concrete equipment must be controlled.
      - Oil must be stored in a manner to prevent the release in case of spill. The General Contractor must check with Owner to determine if SPCC regulations apply. If so, the General Contractor must supply a list of all oil being stored in 55 gallons or larger to the owner, and must abide by the owner's SPCC Plan.

- The contractor shall control run-off with appropriate measures that may include, but are not limited to;
  - Catch basin filters
  - Detention and retention areas
  - Neutralization systems
  - Stone drives to limit the spread of mud from the site
  - Silt fences
  - Soil retaining measures
  - Street sweeping (frequent)
- The General Contractor, the sub-contractor (if applicable) and the Owner shall meet and discuss all options available to decide on the best management practices for the control of run-off.

**Wetlands (Resource Protection Areas)**

The Massachusetts Wetlands Protection Act (MGL Chapter 258) regulates activities within wetlands resource areas, within a 100' buffer of a wetland, or within 200' of a river. Work within these resource protection areas requires an application to the local Conservation Commission. Any "orders and conditions" established by the Conservation Commission of MassDEP, must be strictly adhered to.

- Local bylaws may also apply. If the project involves activity in a resource protection area, a map of that area and specific requirements established are included as an appendix.

**The Stormwater Manager for the General Contractor on the project is;**

		( ) -
Name	Owner / Company	Cell Phone Number

**The Stormwater Manager for the Owner on the project is;**

		( ) -
Name	Owner / Company	Cell Phone Number

For additional information and regulations on Storm Water Regulations, see <http://www.epa.gov/NE/topics/water/stormwater.html>.

**Universal Waste**

Universal waste on the construction site shall include the following materials, which are regulated by the State Department of Environmental Protection (DEP)

- Ballasts
- Batteries

- Computer Monitors
- Light bulbs (except incandescent)
- Equipment containing mercury, such as switches and thermostats

All of these materials are regulated by the state and shall be collected and disposed of in accordance with state and federal requirements.

- For this project, all universal waste must be properly labeled and packaged.
- The General Contractor shall box, tape closed and label the containers as to the actual contents
- The General Contractor shall maintain and inspect (weekly) the universal waste storage area on the job site to insure regulatory compliance.
- When the containers are full, or there are no other universal wastes to be removed from the site, the General Contractor shall contact the owner for disposal method

**The Universal Waste Manager for the General Contractor on the project is;**

\_\_\_\_\_ (\_\_\_\_) \_\_\_\_ - \_\_\_\_  
 Name Owner / Company Cell Phone Number

**Asbestos and Hazardous Building Materials**

- Site assessment prior to work including TCLP
- AQ-06
- ANF-001
- Emergency information

**Clean Air Act**

- Vehicle Idling
- Dust Generation
- Emergency Generators
- Parts Washers

**III. HEALTH**

**General Health and Sanitation**

The General Contractor is responsible for health and sanitation on this project.

- Housekeeping practices are reflective of the site health and sanitation program

- The General Contractor shall be responsible for providing the work site with adequate potable water and disposable cups for the purpose of employee hydration.
- The General Contractor shall provide the appropriate sanitary cans for restroom facilities, unless otherwise negotiated with the owner.
- All restroom facilities including sanitary cans shall have, as a minimum alcohol-based hand cleaners and disposable toilet paper and towels.

### **Health Hazards – Construction Sites**

The following health related hazards have been, or are believed to be on site;

- Cadmium
- Chromium
- Copper
- Hexavalent Chromium
- Lead / Lead Solder
- Magnesium
- Manganese
- Mercury
- Molybdenum
- Nickel
- Polychlorinated Biphenyls (PCB's)
- Silica
- Tin
- Vanadium
- Zinc

It is the responsibility of the General Contractor to perform a risk assessment of the project, make appropriate notifications of the identified conditions and hazards, properly train the affected employees and take the appropriate measures to best protect the health and well-being of the personnel on site.

In order to eliminate the hazards referenced above, the General Contractor should choose one or more of the remediation protocols, identified here-in. Best management practices include, but are not limited to;

### **Asbestos**

**(29 CFR 1926.1101)**

**Based on the information provide in the hazard analysis report for this project the site has;**

- Asbestos**
- No Asbestos**

**Possibility of Asbestos**

**Asbestos may be found in the following locations and materials on this project;**

- Adhesives
- Boilers
- Caulks
- Ceiling Tiles
- Cove Base
- Floor Tiles
- Glue Daubs
- Linoleum
- Pipe Insulation
- Plaster, including very thin patch and skim coats
- Roofing (adhesives, flashing and membranes)
- Sheetrock and Joint Compound
- Slate and Soapstone
- Waterproofing
- Window Caulking and Glazing

If asbestos **is** or **may be** present on site, all employees are required to have a minimum of **2 Hour Asbestos Awareness Training**.

- Although some materials can be identified as non-asbestos by touch (such as fiberglass), the only way to confirm whether or not the material is non-asbestos is to test it.

All material that has not been tested, but has the possibility of being asbestos must be treated as “presumed asbestos containing material” or PACM.

**If suspect asbestos material(s) are found on the project is, contact;**

\_\_\_\_\_ (\_\_\_\_) \_\_\_\_ - \_\_\_\_  
Name Owner / Company Cell Phone Number

For additional information or regulatory requirements on Asbestos Regulations, see <http://www.mass.gov/dos/asbestos/index.htm>.

**Lead**

**(29 CFR 1926.62)**

Lead contaminated materials, including glazed blocks and tiles, paints, plumbing and stains may be present on site.



The following materials has tested positive for lead on this project;

- Block (glazed)
- Paint
- Steel
- Tile (glazed)
- Wood

Lead containing materials shall be properly removed and disposed of using lead safe work practices.

- Lead contaminated wastes shall not be discarded into a construction dumpster, as the level of lead may exceed a TCLP (*Toxicity Characteristic Leaching Procedure*) test, rendering the dumpster contaminated and unable to be disposed of, except at an approved lead landfill, with appropriate documentation.

The General Contractor, with the permission of the owner or owner's representative, is responsible for the safe removal and disposal of all lead containing materials.

**If known or suspect materials with lead are found on this project, contact;**

\_\_\_\_\_ (\_\_\_\_) \_\_\_\_ - \_\_\_\_  
Name Owner / Company Cell Phone Number

For additional information on Lead Paint Regulations, go to  
<http://www.mass.gov/dos/lead>

**Polychlorinated Biphenyls (PCBs)      40 CFR part 761 and 29 CFR 1910.1000)**

In addition to the PCB's that were used in oils, such as for transformers from the end of the 1920's to the end of the 1970's, it was also used in multiple types of caulks (door, joint and window), as well as paints and waterproofing from the 1950's to the end of the 1970's.

- PCB's are also found in light ballasts and capacitors, many of which are still in use today.
- PCB identification must be part of a building hazardous material analysis, prior to alteration, demolition or renovations that includes, but is not limited to door and window replacement, as well as the other building components and items referenced above.

**The following items / materials should be part of the hazardous material analysis for this project;**

- Ballasts
- Capacitors
- Caulks and Glazing
- Oils
- Paints
- Waterproofing

**The PCB contact for the project is;**

\_\_\_\_\_ (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_  
Name Owner / Company Cell Phone Number

**Risk Assessment**

The General Contractor is responsible for a site risk assessment as it pertains to health hazards on the construction site. The risk assessment is performed to limit the potential of, or exposure to health-related issues that could adversely affect personnel on site. The General Contractor should, when necessary, contact an environmental and/or health and safety specialist for health risks that are non-routine or unfamiliar to the contractor(s). The General Contractor should take the following into consideration when performing the required risk assessment;

- Prevent the introduction of problematic chemicals or material on the job site.
- Were the following potential problems taken into consideration?
  - Aerosols (e.g. Spray Paints)
  - Dusts (e.g. Silicosis)
  - Fibers (e.g. Spray-on fireproofing and fibers)
  - Fumes (e.g. Welding and Cutting)
  - Gasses (e.g. Acetylene, Nitrogen and Oxygen)
  - Mists (e.g. Acids, Liquid Droplets and Oils)
  - Mold
  - Smoke (e.g. from Cutting and Welding Operations)
  - Temperature and Humidity
  - Vapors (e.g. Sealers, Solvents, Stains and Waterproofing)

Substitute chemicals and materials, which are considered hazardous with less hazardous, environmentally-friendly materials or processes

**Does the risk assessment include exposure(s) to;**

- Carcinogens
- Corrosives Chemical (acids and bases), as well as Cement
- Fecal Droppings from animals, bats and birds
- Highly Toxic Materials
- Irritants
- Mold / Mildew
- Sensitizers
- Stagnant Chemical(s) / Water(s) in Cooling Towers, Mechanical Equipment / Processes
- Toxic Chemicals

**Did the assessment take into consideration chemicals, materials or processes that could be;**

- **Absorbed** (through skin or improper type of gloves or covering)
- **Ingested** (taken in by mouth)
- **Inhaled** (breathed in)
- **Injected** (by stick or bite)
- Reduce potential risks using engineering controls
  - If engineering controls are not feasible, was personal protective equipment, such as a respirator evaluated
  - If a respirator is warranted, is there a respirator program with the company (OSHA Requirement)
  - Eliminate or reduce potential buildup of a chemical, environmental or health related hazard
  - Slow down the release of a potential concern or hazard
  - Separate incompatible chemicals/materials to prevent unwanted reaction
  - Provide barrier protection
  - Many of the concerns identified in the list above should be resolved or properly dealt with before the project is initiated
  - All hazard assessments should be in writing, as this will indicate that a risk assessment was performed.
  - Risk assessments should include the review of MSDS, which should then be placed into the appropriate binder, file or cabinet

**Does the risk assessment take into consideration the degree of hazard;**

- How much of the solvent is being used?
- Is the area or room properly ventilated?
- Hot Works
- Lead Safe Work Practices
  - How is the work being performed?
  - Are personnel working toward or away from the hazard?

- Dry sweeping vs. Wet Methods or HEPA Vacuuming
- What is the duration of exposure?
- Is environmental temperature an issue (too warm, may increase vaporization)
- Problems with ventilation?
  - What if the exhaust shuts off?
  - Air flow patterns for the area or room
  - Concentration of the chemical or process
  - Housekeeping practices

Was the appropriate Site-Specific Health Hazard Risk Assessment training performed, and was it documented?

For additional information of health-related issues, go to [www.cdc.gov](http://www.cdc.gov) and/or [www.mass.gov/dos/index.htm](http://www.mass.gov/dos/index.htm).

# IV. SAFETY

## **Blasting**

**(29 CFR 1926.900)**

Blasting is a very specialized field that requires a "competent" person to be on-site and actively involved at all times. For regulatory and safety reasons, the following are minimum requirements that must be met, when any blasting materials and associated equipment is on site.

- All blasting shall be performed by a competent, licensed person working for a fully insured and bonded blasting contractor.
- Blasting must be approved, by permit, by the authority having jurisdiction (local fire department)
- When blasting must be performed in congested areas, or in close proximity to a facility, highway, road or structure, or any other installation that could be damaged, the blaster shall take all of the appropriate precautions as it pertains to confinement, delaying, initiation, loading of each blast with "approved" mats or other acceptable "best management practices" to control the throw of fragments, for the protection of the employees, or other persons or property within the area.
- Delivery and issuance of explosives shall be made to and from authorized, qualified personnel and placed into approved containers or magazines.
- The use of black powder is prohibited.
- When blasting is necessary, the following shall be required;
  - Unless otherwise permitted by the Authority Having Jurisdiction, blasting shall only be conducted between sun up and sun down.
  - Only authorized, competent, qualified person(s) shall handle blasting equipment, materials and explosives
  - Precautions shall be taken to prevent accidental discharge of electric blasting caps from current induced by cell phones, dust storms, errant power, lightning, radar and radio transmissions, or other sources of electricity.
  - The use of ignition sources, not related to actual blasting shall be prohibited. Fires, firearms, flames, heat producing equipment, matches, open flames and smoking is strictly forbidden.
    - 50' minimum
  - No person under the influence of alcohol, drugs, medication or other substances that produce drowsiness shall not be permitted to work with blasting equipment and explosives
- All blasting materials and explosives shall be kept in "approved" containers and/or Class II magazines, as required.
- All explosives and blasting agents shall be accounted for at all times, with appropriate documentation of same.
- No blasting agents, explosives or other related material can be abandoned.

- Explosives, blasting agents, and blasting supplies that are obviously deteriorated or damaged shall not be used.
- Empty boxes, paper and filter packing materials, which previously contained high explosives, shall not be used again for any purpose, but shall be destroyed by a means permitted by the authority having jurisdiction.
- Employees authorized and qualified to prepare explosive charges, or conduct blasting operations shall use every reasonable precaution including, but not limited to;
  - Audible and visual warning signals
  - Barricades and/or flag

**The person responsible for activities involve]ving blasting is;**

\_\_\_\_\_ (\_\_\_\_) \_\_\_\_ - \_\_\_\_  
 Name Company Cell Phone Number

**Confined Space**

**(29 CFR 1926.21)**

It is the responsibility of the General Contractor to, in cooperation with the owner to determine where confined spaces are, or may be located on the construction site. The General Contractor shall identify whether the confined spaces being entered are "non-permit" or "permit required", in accordance with the requirements of OSHA.

- Any confined space (see definition), which must be entered, including attics, crawl spaces, elevator hoistways, pits, tanks, tunnels and vaults shall be evaluated by a competent person to aid in the determination of whether or not a permit is required.
- Non-permit required confined spaces could easily become permit required if (as example), the known or potential hazard is or was introduced into the space.
  - Examples of hazards include, but are not limited to;
    - 1/2" of water on the floor
    - Atmospheric hazards such as **carbon monoxide** (> 35 ppm), **lower explosive level** (> 10%), **hydrogen sulfide** (sewer gas) (> 10 ppm), **oxygen** deprivation (< 19.5%) or enrichment (> 23.5%)
    - Chemical
    - Electrical hazards
    - Engulfment
    - Entrapment
    - Environmental and physical hazards (temperature, fire, hot water and steam etc.)
    - Mechanical hazards (moving objects)
- Permit-required confined spaces, such as those with hazards referenced above shall have the following safety precautions in place, as required.
  - All sewers and storm drains are always "Permit-Required" Confined Spaces, as they can not be made safe.

- The following are minimum requirements for "Permit-Required" Confined Spaces;
  - 4 gas (Oxygen, LEL, CO and H2S) monitor for space (atmospheric evaluation)
  - Personal protective equipment, which might include a tripod for personal rescue
  - Attendant (person remaining outside the confined space) for the purpose of occupant safety
    - Attendant must be equipped with, and know how to use a means of communication to contact a rescue service
    - An authorized, properly trained attendant, shall monitor the entrant / occupants within the confined space, the atmospheric / environmental conditions, communication with entrant / occupants and emergency services. *The attendant is not permitted to leave the confined space opening until all entrants / occupants are out of the space, or he / she is relieved by another qualified attendant.*
  - Notification or arrangement of a "designated" rescue service is required.
    - Local fire departments very rarely provide this service, so a company that specializes in confined space / technical rescue shall be identified and on-site at the time a "Permit" Confined Space is entered.
    - Failure to procure a rescue service (in advance) is an OSHA non-compliance issue
  - Permit, completed in advance, which identifies potential hazards and corrective measures
    - Copies of the permits must be provided to any and all entities that require same, before the confined space is entered.

**Designated Rescue Service for the project is:**

\_\_\_\_\_ (\_\_\_\_) \_\_\_\_ - \_\_\_\_  
 Name Company Cell Phone Number

**Cranes, Derricks, Hoists and Lifts (29 CFR 1926.550, 29 CFR 1910.179 & 520 CMR 6.0)**

All crane, derrick, hoists and lift operators who are hoisting and/or moving materials shall be licensed by the Commonwealth of Massachusetts **520 CMR 6.0**.

- The above requirement applies when the machinery being used has a lift of either 10' in height, the load exceeds 500 lbs, and/or the bucket exceeds 1/4 cubic yard capacity.
- All cranes derricks and lifts shall comply with the requirements of ANSI (American National Standards Institute) B30.5, which is incorporated by reference in OSHA regulations, 29 CFR 1910.179
  - The General Contractor, working with the crane operator shall insure that a "competent" person has been appointed to act as the person-in-charge for all lifts involving cranes, regardless of size and/or weight capacity.

- A backhoe, or similar piece of equipment used for lifting is considered a crane, and is subject to this requirement.

The person-in-charge is required to have a Lift / Pick Plan for regulatory and safety reasons. The plan must include, but is not limited to the following requirements;

- The operators name and proof of certification, as well as the signaler name and verification of training
- Area survey to ensure that the work site is stable and appropriate for the weight and work activities of the crane
- Description, type and rated capacity of the crane being used for the lift
- The list of the equipment or material being lifted, including weight, dimensions and other applicable information
- Appropriate sketches or blueprints of how the material will be lifted.
- Boom and swing angles, crane orientations, lifting points, methods of attachment and rated capacity.
- A pre-lift meeting with all personnel that will be involved with the lift, or in close proximity to same.

The General Contractor or their designee is required to barricade or provide warnings to alert persons in close proximity about the overhead work. This shall include, but is not limited to;

- protection of doorways and exits, which might include redirection to an alternative entrance / exit
- tape off hazardous areas, including swing zones and areas where overhead hazards are likely to fall
- examples:
  - removal of dumpsters from the roof
  - lifting and/or moving equipment / materials directly overhead of site personnel
  - personnel are not permitted to work under the load being lifted or moved.
- Inspections of cranes, derricks and associated attachments shall be made by a competent person prior to each use
- Cranes, derricks, backhoes and other lifting equipment shall not be used within 15' (minimum) of power lines > 5kV.

Crane Operators are responsible for operations under their direct control. They shall;

- not engage in any practice that will divert their attention while operating the hoisting equipment
- not operate the lift if their operation is / might be impaired (mentally or physically)
- perform an equipment assessment (walk around inspection) to verify personnel, equipment and site safety
- place appropriate barriers or warning lines around the superstructure to prevent unauthorized entry into the site / area of swing
- test all controls and emergency stops



- improperly functioning / working controls must be adjusted / repaired before the equipment is used.
- If not repairable, the unit must be removed from service and locked and / or tagged "out-of-service".
- respond appropriately to any signals from a trained "signal person"
- be responsible for anyone working under their direct control, and shall stop any unsafe or potential unsafe operation until corrections can be made
- if a "warning signal" is provided, it shall be sounded just before any move is made
- secure and make safe any unattended hoisting equipment
  - when practical, suspended loads shall be landed under brake control
- not permit any person to work under / beneath the boom or suspended load

A competent, authorized and properly trained person shall inspect cranes, derricks and associated equipment, as specified by the manufacturer, prior to each use.

- Crane operators are responsible for their cranes and derricks before, during and after any lift.
  - If the safety of the personnel, equipment or facility is in question, the competent person shall;
    - Stop all hoist activities
    - Refuse to handle or lift non-conforming loads

Hoisting employees on a personal platform of cranes and derricks, when steel erection is being conducted is permitted, provided that all provisions of 29 CFR 1926.550 [except 1926.550(g)(2)] are met.

- Headache balls cannot be used to transport personnel
- Safety latches on crane hooks (regardless of hook capacity and size) shall not be deactivated, removed or disabled
- Crane Inspections shall;
  - be performed by a competent person and shall include all aspects, as specified by the manufacturer of the crane.

Use of cranes, including lifting procedures shall be done in accordance with manufacturer's specifications.

## **Demolition**

**(29 CFR 1926.850)**

Before demolition work is initiated, an engineering survey shall be performed by a competent, qualified person to determine the condition of the structure, inclusive of the framing, floors, walls and the possibility of unplanned collapse of any portion of the structure, or any adjacent structures where persons may be exposed.

- The survey must be in writing

Before demolition of this structure or part there-of is performed, a permit must be acquired from the following regulatory agencies, as a minimum;

- The Local City or Town Building Official, or State Building Official (if appropriate)
- The Massachusetts Department of Environmental Protection
- All utilities must be properly disconnected and made safe, prior to demolition.
  - Electric
  - Gas (LNG and LPG)
  - Telecommunications
  - Sewer
  - Water
  - Dig Safe** shall be contacted, prior to any work that involves digging, inclusive of shoveling.

The General Contractor is responsible for any hazardous conditions that must be removed or made safe, prior to demolition. These conditions may include but are not limited to;

- Asbestos
- Lead paint and contaminated block, tile and wood
- Hazardous Materials and Waste
- Physical damage

**The designated responsible person for this evaluation is:**

\_\_\_\_\_ (\_\_\_\_) \_\_\_\_ - \_\_\_\_  
Name Company Cell Phone Number

- All demolition work, which creates dust (regardless of type) shall incorporate the use of dust control methods, such as a water spray, or other engineering controls to limit dust migration.
- If the structure becomes unsafe for personnel inside, the general contractor, under the requirements of the all hazards plan and the emergency Action Plan shall require the immediate evacuation of the structure until such time as it can be assessed by a competent, qualified person such as a registered professional engineer, and then made safe.

**Chutes**

**(29 CFR 1926.252, 29 CFR 1926.852 and 527 CMR1, sec16)**

- When chutes are utilized on the construction site, they shall be erected and maintained in accordance with the requirements of OSHA, 29 CFR 1926.252 and 29 CFR 1926.852.
- No material shall be dropped to any point, outside of the exterior walls, from a location above the 2nd floor. From the 1st or 2nd floor the area shall be properly protected to prevent accidental injury or property damage.
- Any chute with an angle steeper than 45 deg., shall be completely enclosed to prevent loss of waste to the dumpster.
- All ramps leading to the chute shall have fall protection.
- A gate of substantial strength shall be installed and maintained at the receiving end of each chute. The gate shall be closed at all times when the chute is not being actively used.
- At the ramp / chute connection, a wheelbarrow stop of at least 4” in height shall be installed.
- When dust is created, it shall be properly controlled to prevent migration to other locations.
- Engineering controls, such as water shall be used to keep dust levels as low as possible, and below regulatory requirements.
- Waste chutes on construction sites must (*as of January 2015*) also;
  1. have a trash safety chute plan approved by the local fire department
  2. be of non-combustible construction, or otherwise protected with;
    - not less than one (1) temporary automatic sprinkler within a recess near the top of the chute, which is protected by a guard
    - the temporary sprinkler shall be connected to any available water supply with a listed fire hose, or flexible, commercial rubber hose with a diameter of not less than 3/4”, and
    - shall be protected against freezing

**Electrical Safety**

**(29 CFR 1926.416 and 29 CFR 1910.147)**

**The person(s) responsible for electrical safety on this project are;**

_____	_____	(____) ____ - ____
General Contractor / Superintendent	Company	Cell Phone
_____	_____	(____) ____ - ____
Electrical Contractor / Supervisor	Company	Cell Phone

The General Contractor for this project is responsible for electrical safety, inclusive of the Hazardous Energy Control Policy and Lock Out/Tag Out procedures.

The Hazardous Energy Control Policy must include all known and potential energy sources, including but not limited to;

- electrical
- pneumatic
- plumbing and steam

All electrical power is considered to be **energized** until the responsible electrician or appropriate competent person has verified and tested the system to make sure that it has been **de-energized**.

The General Contractor is ultimately responsible for all wiring on site, including temporary wiring. The General Contractor can delegate components of the electrical safety program to the Electrical Contractor, but the primary responsibility rests with the GC.

- The electrical safety program for this project shall include the effective management of the following;

### **Electrical Cords**

- **Must be protected from physical damage**
  - flexible cords must be free of damage, splices and taps
  - flexible cords shall be properly maintained and stored
  - twisted cords shall be removed from service and destroyed to prevent future use
  - flexible cords should not be so placed that they are considered a trip and fall hazard
  - flexible cords shall have the appropriate grounding pins, or shall be double-insulate

### **Extension Cords**

- cords shall not be placed across a means of egress, or on a walk/work surface shall be connected to a GFCI protected outlet, for the duration of the project

## **Lighting**

**(29 CFR 1926.26 and 29 CFR 1926.56)**

- shall be adequate for the job site
- lighting shall be of the appropriate wattage, and placed in fixtures, including temporary in a manner specified by the lighting manufacturer
- emergency lighting is required if work on the project will extend to after daylight hours
- emergency lighting is required for below grade areas of the project and other areas where natural lighting is not available, in the event of a power failure

## **Power Tools**

**(29 CFR 1926.302)**

- portable electrical equipment and tools must be grounded or double insulated
- the tools shall be free of damage, and if not removed from service
- any power tool removed from service, because of damage, shall be labeled out-of-service by the person(s) who discover the deficiency.

## **Ground Fault Circuit Interrupter(s) (GFCI)**

**(29 CFR 1926.404)**

- GFCI protected equipment and tools can be accomplished by one of the following;
  - a GFCI outlet
  - an outlet protected by a GFCI breaker, or
  - a portable GFCI pigtail
  - GFCI protection for all power tools and flexible cords is required for the duration of the project.
  - When permanent wiring for the building / project or site has been completed, GFCI protection shall still be required. All contractors on site shall either;
    - obtain power from a permanently wired GFCI protected outlet, or
    - utilize a GFCI adapter / pigtail between the power supply and the flexible cord or tool being used

## **Lock-Out / Tag-Out (LOTO)**

**(29 CFR 1926.417)**

- As part of the Hazardous Energy Control Policy, the General Contractor must have a written Lockout / Tagout program on site.
- The Lockout / Tagout program shall take all types of hazardous energy into consideration.
- For this project, the following systems will need to be part of the Lockout / Tagout safety process; Check all applicable energy sources
  - Chemical

- Electrical
- HVAC
- Plumbing
- Pneumatic(s)
- Steam
- Other - \_\_\_\_\_

**Excavations / Trenches (29 CFR 1926.650, MGL 82A and 520 CMR 14)**

No person shall, except in an emergency, make a trench excavation, in any public way, public property, or privately-owned land until a permit is obtained from the appropriately designated permitting authority.

- For this project, the DigSafe # is: \_\_\_\_\_
  - Date of Excavation / Trench: \_\_\_\_ / \_\_\_\_ / \_\_\_\_
- Name of Contact Information of Permit Holder: \_\_\_\_\_
  - Cell Phone #: (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_
- Name of Excavation Contracting Company: \_\_\_\_\_
  - Cell Phone #: (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_
- Name of "Competent" Person: \_\_\_\_\_
  - Cell Phone #: (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_
- Name of Person(s) performing the excavation work: \_\_\_\_\_
  - Cell Phone #: (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_
  - MA Hoisting # (if applicable) \_\_\_\_\_
    - License Grade \_\_\_\_\_ Exp. Date \_\_\_\_ / \_\_\_\_ / \_\_\_\_
- Specific Location of Excavation / Trench: \_\_\_\_\_
- Name and Contact of Insurer: \_\_\_\_\_ (\_\_\_\_) \_\_\_\_ - \_\_\_\_
- Trench Permit(s) completed, as required by Jackie's Law **(520 CMR 14)**

- The permit requester shall obtain the permit for the excavation of trenches for each project from the "appropriate permitting authority".
  - The permit for the excavation / trench on this site shall be obtained from: \_\_\_\_\_
  - The city or town agency shall "electronically", notify the Department of Public Safety of the permits issuance and provide the following information;
    - Location of the excavation indicated on the permit
    - The anticipated opening and closing of the trench
    - Name of the permit holder
    - Name of the competent person
  - In order to acquire a permit, the following information shall be submitted to the city or town agency permitting the trench;
    - Completed application
    - Certificate of Insurance
    - Required "reasonable" fee (where applicable)

Permit applications must contain the following;

- All permit applications shall include;
  - All persons working in / on the trench shall;
    - be familiar with / read the Massachusetts Trench Safety Program
- All permits issued shall be posted in plain view of trench site, and
  - shall have been made available to the permitting authority, any investigator from the Division of Occupational Safety, any inspector from the Department of Publication Safety, or any other lawfully authorized authority.
- All excavations, including but not limited to; auguring demolition of structures, plowing, roto-tilling, test boring, trench and shoveling by hand, inclusive of those on private property require notification of Dig Safe.
- A **trench** is any subsurface excavation > 3' in depth ≤ 16' between soil walls, as measured from edge to edge.
  - **(888) DIG-SAFE** or **(888) 344-7233** in Maine, Massachusetts, New Hampshire, Rhode Island and Vermont
  - The site must be pre-marked before Dig Safe is notified.
- The notification must be made at least **3 business days** in advance and shall include;
  - Address, Exact Location, Scope of Work, Depth in Feet, Area of Work, Start Date/Time, Excavation Company

- The excavation section of this site specific safety manual shall include trenching and shoring
- All excavations > 4' in depth shall require the following;
- Proper benching, shoring, sloping and/or the use of a trench box

The excavation company must follow the appropriate requirements for excavations, including the stipulations for benching, sloping, shoring and the use of trench boxes. However, it is the responsibility of the General Contractor to ensure that compliance with the State Department of Public Safety and OSHA is being met or exceeded.

**For this project, the Excavation Company is;** \_\_\_\_\_

- The **Excavation Manager** is: \_\_\_\_\_ (\_\_\_\_) \_\_\_\_ - \_\_\_\_

**For this project, the excavation contractor will be;**

- Benching
- Shielding
- Shoring
- Sloping with a ratio of \_\_\_\_\_: \_\_\_\_\_
- Trench Box

**The depth of the excavation / trench will not exceed \_\_\_\_\_ feet**

**The Soil Classification is:**

- Class A
- Class B
- Class C
- Pre-Disturbed

- Placement of spoils  $\geq$  3' from the edge of the trench
  - Large stones, stumps etc., must not be permitted to roll into the excavation
- A ladder, ramp or stairway to be placed within 25' of the sub-grade work area for means of egress
- All excavations > 4' in depth shall be monitored for hazardous gases
  - As a minimum, a 4-Gas Monitor (or other appropriate method for the site) shall be used by the excavating company before any work inside the excavation is initiated.



- Any excavation that is or could be  $\geq 20'$  in depth requires the approval of a Registered Professional Engineer
- If any building, sidewalk or other structural element is, or may be undermined by the excavation, or requires underpinning, a Registered Professional Engineer shall be consulted and the plans approved.
- All unattended trenches must be covered, barricaded, or backfilled.
  - Covers must be (at minimum) road plates at least 3/4" thick or equivalent
    - Covers must be level and physically secure
  - Barricades must be fences at least 6' in height with no openings > 4" between vertical supports
    - Openings between fence and ground cannot exceed 4"
    - Fence type barriers shall be secured by vertical support members not more than 10' apart
    - There shall be no holes in a solid barrier greater than 4"
    - All horizontal support members shall be located on the trench side of the barrier
    - If a wall of a dwelling, or other permanent structure (< 6' high) can serve as part of the barrier, but the barrier must be at least 6' in height
    - All gates and other means of egress must;
      - Comply with the size and strength provisions indicated above
      - Be securely fastened to adjacent barrier components
      - Allow not more than 4" between gates and barrier components
      - Be securely locked with a padlock, combination lock or other suitable locking device
      - Gates must have all appropriate markings on all sides (signs) indicating;
        - **"DANGER -Do Not Enter-Authorized Personnel Only"**
    - Barriers shall be placed a sufficient distance from trench to be unaffected by changing conditions of the trench site
  - Backfilling must be sufficient to eliminate the trench, or
  - The Excavator may choose to attend trenches at all times (attendant, guard or police officer)
- All excavations shall be properly protected when open.
- In areas where vehicle traffic is present, the following minimum requirements shall be followed;
  - Barricades or suitable warnings shall be set up to properly make vehicle operators aware of the excavation and work personnel

- All barriers shall be of adequate strength, and shall be supported in a manner that will allow them to be seen by motorist, and provide a stable support not easily blown over by wind or traffic
    - Trench barriers adjacent to high speed traffic may include traffic control such as;
      - barrels ballasted with sand bags
      - temporary pre-cast concrete barriers
    - Trench barriers shall not have openings > 4" between them
    - Trench barriers shall not have openings between barrier and ground > 4"
    - Trench barriers shall be at sufficient distance from the trench to be unaffected by changing conditions of the trench site
  - Appropriate signage shall be used as part of the hazard identification
- Personnel in the roadway shall don appropriate vests or other suitable means of identification. The use of brightly colored (orange, yellow or bright green) clothing such as tee shirts is acceptable. However, during inclement weather, or for work activities after dark, the use of a lime green / yellow vest with reflective stripes is required.
  - Adequate lighting and warnings with suitable reflective striping must also be incorporated
- Barricades must be fences at least 6' in height, with no openings greater than 4" between vertical supports and all horizontal supports required to be located on the trench-side of the fencing.
- In areas where pedestrians and construction personnel are present, the following requirements shall be implemented;
- Barrier protection, such as a guardrail system shall be placed around the excavation that meets or exceeds OSHA criteria for fall protection.
  - When bridges or other temporary walk surfaces are used over the excavation, the use of guardrails with mid rails and toe boards is required.
- If warning lines (caution tape or rope with flags every 6') are to be used, the warning line must be at least 6' back from the edge of the excavation to provide suitable warning.
- Employees working in or around excavations shall have and don appropriate personal protective equipment, including hard hats.
- Employees are not permitted to be beneath or in close proximity to loads handled by excavation equipment. This includes, but is not limited to being in the trench.
- Vehicles backing up to a trench or excavation must have one or more of the following in place
  - Barricades, Spotter with hand signal knowledge, Stop Logs or Curbs or other suitable warning devices

- All excavations  $\geq 4'$  in depth shall be properly monitored for “hazardous atmospheres”
- The use of a 4-Gas Monitor is appropriate to determine levels of oxygen, carbon monoxide, flammability / LEL and Hydrogen Sulfide (sewer gas). If the potential for other gases are present, they must be tested for as well.
  - 4-Gas Monitor shall be in place and operational for hot work activities in all trenches and excavations
- A “competent” person must evaluate all excavations for hazardous conditions, and correct same before any entry is made.
- All covers must be road plates at least  $\frac{3}{4}$ ” thick or equivalent, and placed over an opening must be able to withstand 4 times the heaviest potential load for that site
- The General Contractor is required to properly protect and secure all excavations and trenches at the end of each day. A fence of at least 6’ in height, or higher, as specified by the owner shall be provided and maintained.
- All of the following sanctions are possible, in the event of a fatality, serious injury, failure to utilize proper methods and effective protective systems, or other conditions that pose a serious threat to life, limb or property;
  - suspension or revocation of permits
  - Notices of Non-Compliance or Notices of Violation (NOV)
  - Fines

**Fall Protection**

**(29 CFR 1926.500)**

In accordance with the requirements of OSHA 29 CFR 1926.500, all employers are required to provide fall protection equipment and training to their employees when working at elevations  $\geq 6'$  above a lower level, which includes but is not limited to the ground, platforms, roof or dangerous equipment. The General Contractor on this project is responsible for their employees, as well as the sub-contractors, and shall have a “competent person” on-site at all times.

**The “Competent Person” on this project for Fall Protection Requirements is;**

\_\_\_\_\_ (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_  
 Contractor Company Cell Phone

For this project, the following work activities and fall protection height requirements are;

- **General Fall Protection** \_\_\_\_\_ ft
- **Excavations** \_\_\_\_\_ ft



All wall openings, including windows with elevation differences >6' shall be properly protected with suitable guardrails or other recognized fall protection systems. When holes or openings are used for the passage of materials, such as through a window or elevated level of scaffolding/staging, the opening must be guarded on at least 3 sides when being used for the transfer of materials, and the 4th side, when not being used should be protected with a suitable (removable) guardrail or gate as specified by the competent person.

Guardrails are required around points of access, such as a ladder-way. The open side of the opening shall have a gate, or be off-set to prevent person(s) from falling through or into the opening. When the use of ladders or stilts are required that places the user above the level of fall protection, the competent person shall select an appropriate means of fall protection to cover the increase in height.

Options include the use of harness and lifelines, extending the guardrail system up, or placing the workers in a guardrail system in an elevated platform. When using warning lines for fall protection, in place of guardrail systems, the warning lines must be;

- Rigged and supported to a height of 39 – 45"
- the lowest point is 34" – 39"
- be flagged every 6'

Fall Protection Equipment including, but not limited to harnesses, lanyards, deceleration devices, anchors, straps and other fall protection equipment shall be:

Inspected by a competent person before each use for damage, deficiencies and replacement

- Any fall protection equipment that has been damaged, must be removed from service and labeled out-of-service.
- Kept clean and placed in suitable containers to prevent exposure to abuse, damage and adverse environmental conditions.
- Holes  $\geq 2$ " (inches) in diameter in a walk or work area must be covered or otherwise protected to prevent items, materials and tools from falling through.
- The hole cover must be labeled "HOLE" or "COVER"
- All ramps, stairs and walkways, including those that are temporary are required to have hand / guard rails on both sides if there are  $\geq 3$  steps, or a drop of  $\geq 6'$ .

## Roof Work

- All roof work which is greater than 6' above a lower level is required to have fall protection, including flat and low-slope roofs.
- A competent person must identify the appropriate means of fall protection to be used, for the work being performed.

### For this project, the roof slopes are:

- No Slope (Flat)
- < 4 : 12
- > 4 : 12, but < 6 : 12
- > 6 : 12, but < 8 : 12
- $\geq$  8 : 12

### The use of the following types of Fall Protection will be required;

- Controlled Access Zones
- Guardrails
- Monitors
  - Roof Monitors - **Permitted**
  - Roof Monitors - **Not Permitted**
- Scaffold / Staging
- Slide Guards
- Warning Lines / Ropes
- Other: \_\_\_\_\_

If a roof monitor is used as fall protection, the roof must be flat (no pitch) and less than 50' in length and width, the monitor is not permitted to perform any work, shall wear a

reflective vest or blue hard hat and shall not permit any equipment to be running during the roof work.

For this project the Safety Monitor (if used) cannot monitor greater than \_\_\_\_\_ employees, who all must be within \_\_\_\_\_' of him/her at all times.

**Warning lines, if used on the roof for fall protection must:**

- be placed at least 6' back from the roofs edge,
- be flagged every 6' in contrasting color,
- not be permitted (at any point) to be lower than 34" above the roof, and
- be able to withstand a force of 16 lbs applied at the stanchions

No person, unless actually performing work between the warning line and the roofs edge is permitted outside of the warning line.

**Residential Construction - Fall Protection**

Fall protection requirements for residential construction shall comply with the requirements of **OSHA 29 CFR 1926.501(b) (13)** for work  $\geq$  6' above the lower level.

Residential construction activities can utilize alternative fall protection procedures, provided the alternative provides the same or greater level of protection.

Fall Protection requirements and training shall include;

- Falling object prevention
- Installing of the 1st two trusses
- Procedures for working at the peak
- Procedures for the prevention of falls
- Staging and securing of equipment and materials
- Placement of slide guards
- Restricting of unauthorized access
- Prevention of potential falls through holes, sky-lights etc.
- Bad weather modifications

## **Fire Prevention**

**(29 CFR 1926.24, 29 CFR 1926.150 and 527 CMR 1)**

### **Fire Detection and Alarms**

For this project, a fire detection system is required as stipulated by the owner, the insurance company and/or the local fire department.

**Y N**

- If fire detection and monitoring of the alarms is required, the installation shall be placed in service in accordance with the Fire Prevention Program, and shall comply with the requirements of NFPA 72.
- If, at any time, smoke detector(s) must be covered to prevent a nuisance alarm, the General Contractor must ensure that a Smoke Detector Inspection Log is being maintained that specifically identifies the building, room number or area, date, time the detector was covered, and then removed by the “responsible person”
  - Whenever the area / room is unoccupied, including for lunch, the detector cover must be removed, and the time documented on the log.

Whenever the fire detection system must be altered, shut-down or removed from service, the local fire department shall be notified in advance.

- The General Contractor shall also notify the owner and verify notification of the owner's insurance company.

In the event of a fire alarm, all persons within the building are required to evacuate as referenced in the Emergency Action Program section referenced at the beginning of the site-specific environmental health and safety program.

### **Fire Extinguishers**

Shall be conspicuously placed in appropriate areas of the construction or project site. As a minimum, a suitable (code compliant) extinguisher must be placed at;

- each EXIT door on all floors
- each storage area / room
- within 25' of hot work activities and operations, as well as on each welding cart
- workshop(s)

Fire Extinguishers on site shall have the following;

- annual (in date) inspection tag
- a gauge indicating fully charged, and



- pin with security seal

Fire extinguishers shall only be used by personnel who have been trained to use this equipment

Persons without training shall evacuate the building

In the event of a fire emergency, regardless of size, the following shall occur;

- Notify person(s) within the immediate vicinity of the fire, and request that they evacuate.
- Leave the area or room, and if possible close the door to the room
- Activate the closest fire alarm pull station, which is typically located next to the stairs or exit door.
- From a safe location, such as outside by cell phone, dial the local emergency number or 911 and report the emergency.
- If the above requirements have been completed, you are trained, and you are comfortable with the size of the fire and the use of the extinguisher, then attempt to extinguish the fire, but do not place yourself at risk.
- Report all fires, and complete the appropriate incident reports. Return any damaged, defective, discharged or outdated extinguisher to the project superintendent for replacement.

## **Fire Suppression**

The fire suppression systems (hydrants, sprinklers, standpipes or other specialized system) shall be installed and maintained in accordance with the requirements of the Massachusetts State Building (IBC with Massachusetts Amendments, and Fire Prevention Regulations (527 CMR 1).

- For new construction in buildings that are > 3 stories in height, the standpipe system shall be installed as the building is constructed (as a dry system) for the local fire department
- For alterations and renovations, existing sprinklers and/or standpipes must remain in place and operational until it is absolutely necessary to remove parts there-of.
  - Fire protection systems shall be maintained in accordance with the requirements of the Massachusetts Building and Fire Prevention Regulations, IBC, section 3311 and 3312 and 527 CMR 1, respectively.
    - No fewer than one (1) standpipe shall be provided during construction. The standpipe (temporary or permanent) shall be installed prior to construction exceeding 40' in height above the

lowest level of fire department vehicle access, and shall be extended as construction progresses to within one floor of the highest point of construction having secured decking or flooring, and

- During demolition operations, the standpipe must be removed with the building in a manner that maintains the system one floor below the floor being demolished.
- Whenever the fire suppression system must be altered, shut-down or removed from service, the local fire department shall be notified in advance.
  - General Contractor and the insurance company(s) shall also notify the owner and verify notification of owner's insurance company.
- All fire department systems, including fire department connections (FDC) hydrants, sprinklers standpipes, etc., whether temporary or permanent shall be maintained at all times, with inspection documentation provided by the FPPM upon request.

## **Heating Equipment**

**(29 CFR 1926.153, 29 CFR 19.26.154, 527 CMR 1)**

- Heating equipment used on site shall meet the requirements of OSHA 29 CFR 1926.53; 1926.154 and the local and state fire prevention regulations.
  - Permits are required for the use of salamanders and other heating equipment that utilize natural gas and/or propane.
    - Propane gas tanks and cylinders require;
      - permits for the storage and use of gas
      - a suitable base
      - gas cylinders require a chain or strap for security, as wires and coat hangers are not permitted
  - No flammable or combustible gasses or liquids, or open flames can be located near any means of egress on a construction site. If heaters are located in close proximity to a door, the fuel supplying same shall be a minimum of 25' from the door.

When heating devices are utilized on site, which require combustible fuels, including coal, fuels, gasses and wood, an approved carbon monoxide detector shall be used to verify that levels are carbon monoxide do not exceed 30 ppm.

## Housekeeping

(29 CFR 1926.25 and 527 CMR 1)

- The General Contractor is responsible for the overall housekeeping practices on the site.
- As a minimum, the aisles, exits and other parts of the means of egress shall be properly maintained and free of unnecessary storage and waste.
- Sawdust and other combustible materials such as cardboard and paper shall be removed daily to reduce the risk of injury and fire.
- Trip and fall hazards shall be removed as soon as possible, especially in areas considered to be walk / work surfaces
- Dumpsters  $\geq$  6 cubic yards in size, located on a construction site require a permit from the fire department.
  - The dumpster shall not be placed up against the building under construction, unless approved by the local fire department.
  - The dumpster, in accordance with the requirements of the building code shall be immediately emptied, when full.

Housekeeping practices on this project is extremely important. In order to reduce the risk of fire, prevent injuries and reduce the risk of a regulatory inspection, housekeeping must be maintained.

- Waste shall be discarded in a suitable container.
- Sawdust and rags should be placed in a metal (approved) container with a tight (proper-fitting) lid.
- All waste containers (inside the building) shall be emptied at least daily.

Corridors and other walk / work areas shall not be used for storage.

## Flammable and Combustible Liquids

(29 CFR 1926.152 and 527 CMR 1)

- Shall be placed in appropriate containers and cabinets.
- The cabinets and containers shall be NFPA compliant, as required by the local building and fire departments.
- Shall not be located in a means of egress or exit.
- Shall be labeled properly (without abbreviation). The name of the chemical and the appropriate hazard must appear on the “appropriate” container.

## Safeguarding Construction (Alteration and Demolition Operations) (NFPA 241, 2022 edition)

This code reference standard shall apply to structures during alteration, construction demolition and renovation, including those in underground locations, for the purpose of

providing reasonable safety to life and property from fire during the above referenced operations.

The site shall have a designated **Fire Prevention Program Manager (FPPM)**

- The FPPM shall be a “competent person” with knowledge of applicable fire protection codes and standards, available fire protection systems, and fire inspection procedures
- The FPPM shall conduct daily inspections to identify deficiencies and hazards, and shall make inspection reports available to the AHJ upon request.
- The FPPM is responsible for the development of pre-incident plans, in coordination with the appropriate fire agencies.
- The plans must be kept up-to-date, and shall include provisions for onsite visits by the AHJ

**Site Security** – When required by the AHJ, buildings with combustible construction exposed during construction more than 40’ above grade shall be provided with fire safety trained guard service when there are no construction crews on site.

#### **Fire prevention Program (NFPA 241)**

An overall project specific Fire Prevention Program shall be developed for the project, with the following issues to be addressed;

1. Pre-Incident Planning
2. Emergency Contacts (with cell phones and email addresses)
3. Site Emergency Contact Procedures
4. Site and Incident Specific Responsibilities for Personnel
5. Signage, including, but not limited to; building address per AHJ
6. Hot Works Programs and Requirements
7. Fire Protection Systems, already addressed within this document
8. Emergency Reporting Procedures
9. Emergency Evacuation Procedures
10. Housekeeping Practices and Requirements
11. Waste Disposal
12. Security – On Site Requirements
13. Special Hazard Identification and Response Protocols
14. Structure and Equipment – Exposure Fire Protection
15. Fire Safety Documentation, including, but not limited to;
  - Fire and Evacuation Drills
  - Inspections for fire prevention, hot works, housekeeping etc.
  - System Testing

- Fire and Safety Training (as indicated throughout this document)
- 16. Life Safety Planning
  - Emergency Alert Notification for Personnel
  - Mean of Egress Safety, which includes all Exit Access, Exits and Exit Discharge components
- 17. Utility Safety, both Permanent and Temporary
  - Electrical
    - Bonding and Grounding
  - Gas (Natural and Propane)
    - Detection for Carbon Monoxide (CO) and Gas
    - Follow Massachusetts Fire Prevention Regulation (527 CMR 1) and NFPA 55, 58
  - Mechanical
  - Plumbing
    - Failures and Leaks

All of the above information should be readily available for inspection and review by any and all regulatory agencies, local, state and federal.

If a **“Command Post”** is required on, or adjacent to the Construction Site(s) it shall be at the discretion of the AHJ

- For emergency access to a building or structure, most notably after-hours, the AHJ can require the placement of a Lock/Key Box. The Key/Lock Box shall be an approved type, and shall contain keys to gain access as required by the AHJ

### **Road Access**

- Every building, facility or structure shall be accessible by the fire department and other appropriate emergency response agencies by means of roadways having all-weather driving surface  $\geq 20'$  of unobstructed width with the ability to withstand the live loads of fire apparatus (including ladder trucks with outriggers) and having a minimum of 13' 6" of vertical clearance.
  - Roadways shall meet the requirements of the AHJ
  - “No Parking” signs shall be posted, as required by the AHJ
  - Fire department access roads shall not be used for staging or storage areas.

## Limited and Non-Combustible Materials

- **Limited Combustible Material(s)** shall meet one of the following requirements;
  - It needs to be able to produce a heat value less than 3,500 BTU/lb when tested in accordance with NFPA 259. (For context paper has a heat value of approximately 7,000 BTU/lb, wood is about 10,000 BTU/lb while most plastics are in the 15,000 to 22,000 BTU/lb range)
  - Tested in accordance with ASTM E2965 at an incident heat flux of 75kW/m<sup>2</sup> for 20 minutes and meet the following conditions.
    - a. Peak heat release rate doesn't exceed 150kW/m<sup>2</sup> for more than 10 seconds
    - b. Total heat released is less than 8MJ/m<sup>2</sup>
  - Either one of the following
    - Material has a noncombustible base with a surface that doesn't have a flame spread index greater than 50 when tested in accordance with ASTM E84. The surface on top of the noncombustible base can't be thicker than 1/8th inch (3.2mm)
    - Flame spread index is less than 25 when tested with ASTM E84 or UL 723, even if the material is cut.
- **Non-Combustible Material(s)**
  - A material, in the form in which it is used, and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors when subjected to fire or heat
  - Materials that pass, when tested in accordance with either ASTM E136 or ASTM E2652 are considered noncombustible. Also, any inherently noncombustible materials can be considered noncombustible without having to be tested.

## Fire-Resistance Rated Openings – Protection

- Opening protectives used in alterations, demolitions or renovations shall remain in place and not be altered or obstructed until they are no longer required.

## Construction Barriers - Temporary

- Barriers shall be provided to separate occupied portion(s) of a structure from areas that are being altered, constructed, demolished or renovated when such operations have a higher level of hazard than the occupied portion of building
- Barrier(s) must have a minimum of a 1-hour fire resistance rating.
  - The AHJ (Building Inspector) may require a more significant fire resistance rating, as referenced in the building code.

- Opening Protectives (i.e. doors) shall have a minimum rating of at least 45-minutes
- Barriers shall not interfere with the operation of any fire and life saving devices

### **Construction, Equipment and Storage – Temporary**

- Separation distances between buildings with combustible construction or contents that are unsprinklered and construction related structures such as modular structures, temporary offices, sheds, trailers and other facilities for the storage of materials and tools shall be in accordance with the requirements of the AHJ's, both building and fire.

### **Wood Structures (Tall Mass Timber) – Construction Operation Safeguarding**

- **Fire Exposure Analysis** – Prior to construction, a study shall be conducted to ensure that the installation of passive and active fire protection features, combined with separation provided between other structures on the same or adjacent lots, are adequate to allow safe egress, and to prevent fire spread to the exposed structures.
  - The above referenced analysis shall be included with the construction documents submitted with the building permit, and acceptable to the AHJ's.
- Site Security Fences (minimum of 6' high) shall be provided around the entire exterior of the construction site
- 
- **Wood structure Panels** shall be designed, manufactured, and identified in accordance with NFPA 5000
  - Structural wood members that are required to receive passive fire protection shall have the protection installed as required by the fire exposure analysis, referenced above.
- **Fire Department Connections, Hydrants, Standpipes and Water Mains**
  - Egress stairwells in the construction areas of the structure shall be equipped with an operational standpipe during construction, meeting the requirements of the AHJ's.
  - The distance to a Fire Department Connection (FDC) shall not exceed 100'
  - Hot Work Fire Watches for this section shall remain in place 2-hours after hot work has been completed.

## Wood Frame (Large) Structures – Construction Safeguards

- A Large Wood Structure shall be considered all wood structure that meets one of the following conditions;
  - Up to, and including, 3 stories and > 150,000ft<sup>2</sup> aggregate total floor area
  - Over 3 stories, or over 40' above the lowest level of fire department vehicular access, and > 50,000ft<sup>2</sup> aggregate total floor area.
- Torch applied roofing systems are not permitted
- **Fire Exposure Analysis** – Prior to construction, a study shall be conducted to ensure that the installation of passive and active fire protection features, combined with separation provided between other structures on the same or adjacent lots, are adequate to allow safe egress, and to prevent fire spread to the exposed structures.
  - The above referenced analysis shall be included with the construction documents submitted with the building permit, and acceptable to the AHJ's.

Site Security Fences (minimum of 6' high) shall be provided around the entire exterior of the construction site.

## Welding / Cutting / Hot Work Activities (29 CFR 1926.350-354 and 527 CMR 1)

Brazing, cutting, heating, soldering, welding and other spark producing work on this job requires the acquisition of a Hot Work Permit, as required by the local fire department and OSHA.

- All Hot Work Activity must be performed by a “competent person” who has been trained and certified to conduct these operations, including Fire Watch, in accordance with the requirements of the Massachusetts Fire Prevention Regulations, 527 CMR 1.
- As a minimum, a **½-hour** Fire Watch is required for any Hot Work Activity, after the hot work activity has been completed
  - Exceptions – a minimum 2-hour Fire Watch is required for;
    - roofing activities involving hot processes, including, but not limited to asphalt and tar kettles.
    - Wood Structures for Tall Mass Timber Construction
- The basic requirements of a Hot Work Permit are;
  - The area(s) in which the Hot Work will be performed must be inspected
  - All containers, pipes and tanks that were used for other than water or steam shall first be purged and cleaned



- All combustible material shall be located at least 35' away from the Hot Work Area
- Fire extinguishers must be of proper size and type for the Hot Work activity, and shall be located within 25' of the Hot Work Area
  - Exhaust ventilation or other smoke evacuation / neutralization system shall be used at the area of Hot Work to reduce employee exposure.

**Hazard Communication / GHS (29 CFR 1926.59 and 29 CFR 10190.1200)**

All contractors working on this project are required to have a written Hazard Communication Program as required by OSHA and the Commonwealth of Massachusetts.

- Every employee on site must have proof of Hazard Communication / Right-to-Know Training

Each contractor on site shall have a binder or other General Contractor/Owner approved manual with all of the Safety Data Sheets (SDS) for the products that will be used on the job site. The binder shall be all-inclusive and up-to-date.

- The General Contractor will maintain all SDS binders in the project / site office for the duration of the project

For any material left on site, after project completion, the GC shall provide a copy of the SDS to the owner

- All SDS located in the binder shall be less than 5 years' old
  - SDS's provided by Sub-Contractor

Every container located on site shall be properly labeled, including water

- The use of abbreviations or chemical symbols is not permitted. All container contents must be completely spelled out
- The labels must be suitable for the environment. Containers placed outdoors shall not have labels that fade or deteriorate because of exposure to rain, snow or sunlight.

Every container shall identify the chemical hazard as well (i.e. corrosive, flammable, reactive or poison/toxic).

All warning labels and placards must be in place, and of the correct size and color to warn employees of potential hazards.

- All labels and warnings shall face forward for purposes of inspection and emergency response.

## **Ladders and Stairways**

**(29 CFR 1926.1053 - 1926.1060)**

- Only Type I and Type II ladders shall be used on this project
- All ladders shall be inspected before use, and shall be removed from service if broken, damaged or unsafe
  - The above referenced ladder must be tagged out – of – service and reported to the supervisor by the person performing the inspection
  - Ladders shall not be painted or covered in any manner that will hide cracks and other defects
  - Ladders shall have all of the appropriate warning and danger labels in place, maintained in legible condition
- Ladders must be utilized in a manner specified by the manufacturer
- The General Contractor shall determine the type of fall protection that shall be used when working with a ladder on the job site
  - Tying the ladder off, or having a person “spot” the ladder are possibilities
- The ladder must be the appropriate size and type for the work being performed
- Metal ladders shall not be used around electrical equipment such as power lines, transformers and electric panels

### **Extension, Fly or Straight Ladders shall...**

- be pitched at the required 1 : 4 ratio
- be tied or otherwise secured to the structure or elevated surface to prevent tipping or falling
- be extended at least 3 (preferably 5) rungs above the elevated surface to be accessed
  - The top 3 rungs of the extension, fly or straight ladder shall not be used as a step

### **Fixed Ladders shall...**

- be made and installed for the environment it is intended to serve
- be manufactured and installed in accordance with the ANSI Standard for Fixed Ladders
  - construction

- elevations
- fall protection
- spacing from walls ( $\geq 7$ " from wall to rung)

The General Contractor shall verify that a suitable and approved means of fall protection will be affixed to the fixed ladder

- Both permanent and temporary fixed ladders
- be inspected by a "competent person" for structural integrity and general safety

**Job Made Ladders** shall...

- be constructed in accordance with the requirements of OSHA

**Step Ladders** shall...

- be opened completely with spreaders locked in place
- not be used as straight ladders
- be tall enough to perform the necessary work

The top 2 steps of a step ladder shall not be used for standing

## Lasers

**(29 CFR 1926.54)**

- The General Contractor is responsible for the use of Lasers on the job Site
- Lasers are regulated by their hazards. The laser(s) being used on his site are;
  - Class 1
  - Class 2
  - Class 3A
  - Class 3B
  - Class 3R
  - Class 4
- Class 2 and 3A lasers are often found on construction sites for the purpose of aligning and leveling.
- In order to use a laser on a construction site, the employee must be properly trained, and have proof of training
- When the laser is not being actively used (breaks, lunch, or other extended periods of > 10 minutes) the laser shall be shut-off.
- The GC must insure that all entrances to the work area where lasers are being used shall be labeled with the appropriate approved DANGER or WARNING signs that indicate a Class 2 or 3A laser is in use

- Lasers must have appropriate labels, stickers and warnings affixed, which shall be maintained in good condition
- Reflective surfaces, including mirrors shall not be located in areas where lasers are in use.
- Specialized protective eyewear may be required

**Machine and Equipment Guarding**

**(29 CFR 1926.300 (b) (1))**

- Machine guarding shall meet the requirements of OSHA
- All exposed blades shall be guarded to prevent accidental injury
- All belts and pulley’s will be protected with a suitable guard to prevent accidental contact
- All table saws shall have the appropriate blade guards, anti-kickback devices and push sticks
- The GC shall be responsible for determining what equipment shall have guards, and the appropriate guard for the equipment or machine.
  - Guards shall be used and installed in accordance with manufacturers specifications

**Permits**

The General Contractor is responsible for the procurement of all appropriate permits for the project.

**For this project, the following permits will be required;**

- Air Quality for Demolition**      MassDEP
- Asbestos**      MassDEP and MassDLS
- Building**
  - Alteration
  - Construction
  - Demolition
  - Renovation
- DigSafe**
- Dumpster**    ≥ 6 cubic yards
- Electrical**
- Excavation / Trench**
- Fire Detection**
- Fire Suppression**

- Sprinkler
- Standpipe
- Flammable Liquids**
- Gas**
  - Natural (LNG)
  - Propane (LPG)
- Hot Work**
- Plumbing**
- Roofing (Hot Work)**
- Salamander(s)**

### **Personal Protective Equipment (PPE)**

**(29 CFR 1926.28 and 1926.95)**

The General Contractor shall be responsible for employees wearing the appropriate personal protective equipment on the construction site, if there is an exposure to a hazardous condition, or if regulations require the use of specified equipment to reduce the hazards on site.

**Hazard Assessment** - The General Contractor shall perform a hazard assessment for this project. During the assessment, the contractor(s) shall identify potential areas of concern, such as;

- Sources of motion, such as machines and tools
- High and low temperatures
- Chemical Exposures
- Health related hazards
- Sources of radiation, such as lasers
- Falling and sharp objects
- Electrical hazards
- Personal Protective Equipment (**PPE**) includes, but is not limited to the following;
- **Eyes / Face**
  - Safety Glass** (with side shields)
  - Safety Goggles**
  - Face Shield** (with primary protection safety glasses / goggles beneath)
    - Face Shields are secondary protection
  - Eyewear** (Specialized); \_\_\_\_\_
    - Safety glasses shall only be used for impact protection
    - Prescription safety glasses shall have side shields in place, if being used as safety glasses

- Goggles shall be worn whenever chemicals are used, or there is a splash potential
- Face Shields are secondary protection. They must be worn over safety glasses or goggles
- Eye Protections for this project shall be worn;
- At all times on the construction site (inside the fence)
- When performing work that involves impact
- When using chemicals

**Fall Protection (29 CFR 1926.500)**

- Shall be supplied and maintained by the appropriate contractor(s)
- The General Contractor is responsible for the use of fall protection on site.
- All fall protection equipment shall be properly inspected before use, and shall be maintained in accordance with the requirements of the manufacturer
- Fall protection shall be kept clean and stored in appropriate containers (when not in use) to protect it from environmental conditions and other damage

**Foot Protection (29 CFR 1926.96)**

- For this project the use of foot protection is required \_\_\_\_\_ not required \_\_\_\_\_
- Foot protection shall be work-type specific (i.e. EH – Electrical Hazards)

**Hand Protection (29 CFR 1910.138)**

- For this project, the following types of hand protection shall be used;
  - Chemical Resistant Gloves for the following materials: \_\_\_\_\_
- Leather Gloves
- Other: \_\_\_\_\_

**Hearing Protection (29 CFR 1926.52 and 29 CFR 1926.101)**

The General Contractor is responsible for hearing conservation and protection on this work site. Through the General Contractor or the appropriate sub-contractor, all employees shall be provided with hearing protection to reduce the dB levels in accordance with OSHA requirements.

- The GC shall make the following hearing protection available
  - Ear Plugs
  - Ear Muffs

- Other Engineering Control: \_\_\_\_\_

## **Head Protection**

**(29 CFR 1926.100)**

The General Contractor is responsible for the use of head protection on the work site.

- For the duration of this project, hard hats will be required in all areas of the job site
- In order to remove a hard hat inside the building, permission must be obtained (in advance) for reasons of liability from the General Contractor or their designated representative.

## **Respiratory Protection**

**(29 CFR 1926.103)**

Respiratory protection on this job site is the responsibility of the General Contractor.

Any company (General Contractor or Sub-Contractor) wishing to use a respirator shall have a written Respirator Program that meets the requirements of OSHA.

- Only persons that have been medically evaluated to wear a respirator can be provide with a respirator.
- Contractors are completely responsible for persons using respirators on site. Even when the respirator is purchased and brought to the site by the employee, without prior company knowledge, the company is still responsible for the health and safety of that employee, who may be using the inappropriate respiratory protection.
- Because a dust mask is a negative pressure respirator, it must be included in a written respirator program, and the employee must be approved to wear it.

**Exception:** if the employee asks to wear a respirator (not required to), it can be provided

## **Aerial (Personel) Lift(s)**

**(29 CFR 1910.66 and 29 CFR 1926.453)**

- Personnel lifts such as articulating booms, single person upright lifts (i.e. Genie, JLG and Uprights) and scissors lifts shall be used in a manner specified by the manufacturer, in accordance with the requirements of OSHA 29 CFR 1910.66.
- All articulating booms, including Genie lifts and truck mounted articulating booms are required to have personal fall protection equipment, consisting of approved full body harness and lanyards.
- Scissors Lifts, as well as Genie, JLG and Upright Lifts that are equipped with a guardrail system do not require the use of a full body harness and lanyard, as the cage (guardrail) is considered fall protection.

- **Exception:** If manufacturers specifications or company policy indicate that the full body harness and lanyard (or similar) is required, the use of same shall be mandated.
- Any person using a personnel lift must be properly trained, in accordance with manufacturer's specifications
- All lifts shall bear the following manuals and warnings, in legible condition;
  - The operator's manual shall be located on the lift at all times, for ease of reference
  - All danger and warning stickers shall be attached to the lift and shall be in legible condition
- Personnel lifts shall be inspected before each use, and must be removed from service if a deficiency is noted
  - All safety devices and related equipment shall be tested as part of the inspection for proper operation.
  - The lift, if damaged or otherwise impaired shall be tagged "out-of-service" to prevent use, until repaired.
    - Lifts shall only be repaired or altered by a service technician approved by the manufacturer.
- Whenever a lift is utilized (exterior or interior), the area / site shall be inspected for hazards, which include, but are not limited to;
  - Overhead concerns (i.e. beams and columns, lights, sprinklers, etc.)
  - Flooring and ground abnormalities (i.e. holes, unstable / soft ground, floor vents and grates)
- Personnel who utilize one of the lifts referenced above can use same to access a higher-level platform, provided;
  - they are attached to the structural component of the lift (with harness and dual lanyard) that provides them with the ability to have fall protection attached to the lift, and another lanyard that can be attached to an adequate, recognized anchor point on the elevated surface, before the primary lanyard is disconnected from the personnel lift.
- All lifts are now required to have an emergency rescue plan (29 CFR 1926.502(d)(20))



## **H - Pile and Sheet Pile Driving**

**(29 CFR 1926.603)**

- Boilers and piping systems which are a part of, or used with, pile driving equipment shall meet the applicable requirements of the American Society of Mechanical Engineers, Power Boilers (section I).
- All presser vessels which are a part of, or used with, pile driving equipment shall meet the applicable requirements of the American Society of Mechanical Engineers, Pressure Vessels (section VIII)
- Stop blocks shall be provided for the leads to prevent the hammer from being raised against the head block.
- A blocking device, capable of safely supporting the weight of the hammer, shall be provided for placement in the leads under the hammer at all times while employees are working under the hammer.
- Guards shall be provided across the top of the head block to prevent the cable from jumping out of the sheaves.
- Fixed leads shall be provided with ladder, and adequate rings, or similar attachment points, so that the loft worker may engage his safety belt lanyard to the leads.
- Safety chains, or equivalent means, shall be provided for each hose connection to prevent the line from thrashing around in case the coupling becomes disconnected.
- Guys, outriggers, thrust outs, or counterbalances shall be provided as necessary to maintain stability of pile driver rigs.
- Pile driving from barges and floats. Barges or floats supporting pile driving operations shall meet the applicable requirements of 1926.605. Also see Item 3. entitled Marine Operations and Equipment.
- Engineers and winch-men shall accept signals only from designated signalmen.
- All employees shall be kept clear when piling is being hoisted into the leads.

## **Power Tools**

**(29 CFR 1926.300 - 29 CFR 1926.307)**

- All hand and power tools shall be maintained in safe condition.
  - Electrical cords shall be without damage or splice.
    - Badly twisted primary and extension cords shall be removed from service
  - On all construction sites, the use of Ground Fault Circuit Interrupters (GFCI) is required.
    - When the electrical service has been completed, inspected and approved for the site, and the temporary service has been removed or is no longer in use, the use of GFCI (including pigtailed and fixed) is still required.

- Guards shall be used on all equipment with exposed and moving parts, that have the potential to place employees at risk.
  - Guards shall have openings small enough to prevent accidental finger access/exposure
  - Guards removed for maintenance and repair shall be replaced immediately after the work is performed
  - If the guard(s) must be removed, the power to the equipment, machine or power tool shall be unplugged or de-energized by circuit breaker or disconnect.
    - See Lock-Out / Tag-Out requirements in the Electrical section
- Blade guards are required for all table saws
  - Push-sticks shall be located next to, and shall be used for work on table saws, as required.
- Air compressors used for pneumatic equipment shall not be used for removing dust or other particulates from clothing or equipment / tools unless the pressure has been regulated down to below 15 psi.
- Any and all tools found to be damaged or defective shall be removed from service, and tagged “**out-of-service**” to prevent accidental use. Damaged or defective equipment and tools shall include, but not be limited to;
  - missing ground (pin)
  - equipment and tools from which a shock was received
  - equipment, tools and cords that have been taped to cover physical damage
- Contractors using tools in hazardous areas shall verify that the equipment or tools can be used in that type of environment.
  - Flammable and Combustible Liquids - Intrinsically Safe Equipment
  - Wet Areas - Ground Fault Circuit Interrupters

## **Saws**

**(29 CFR 1910.212, 29 CFR 1910.213 and 29 CFR 1917.151)**

- Any automatic cutoff saw that strokes continuously without the operator being able to control each stroke shall not be used.
- Saw frames or tables shall be constructed with lugs cast on the frame or with an equivalent means to limit the size of the saw blade that can be mounted, to avoid over-speed caused by mounting a saw larger than intended.
- A mechanical or electrical power control shall be provided on each machine to make it possible for the operator to cut off the power from each machine without leaving his position at the point of operation.
- All portions of the saw blade shall be enclosed or guarded, except for the working portion of the blade between the bottom of the guide rolls and the table.

- Bandsaw wheels shall be fully encased. The outside periphery of the enclosure shall be solid. The front and back of the band wheels shall be either enclosed by solid material or by wire mesh or perforated metal. Such mesh or perforated metal shall be not less than 0.037 inch (U.S. Gage No. 20), and the openings shall be not greater than 3/8". Solid material used for this purpose shall be of an equivalent strength and firmness.
- The guard for the portion of the blade between the sliding guide and the upper-saw-wheel guard shall protect the saw blade at the front and outer side. This portion of the guard shall be self-adjusting to raise and lower with the guide. The upper-wheel guard shall be made to conform to the travel of the saw on the wheel.
- Hand-fed circular ripsaws and hand-fed circular crosscut table saws. Unless fixed or manually adjustable enclosures or guarding provides equivalent protection, hand-fed circular ripsaws and hand-fed circular crosscut table saws shall be guarded as follows to keep employees clear of any danger zones.
- All cracked saws shall be removed from service.

### **Radial Saws**

The upper hood shall completely enclose the upper portion of the blade down to a point that will include the end of the saw arbor. The upper hood shall be constructed in such a manner and of such material that it will protect the operator from flying splinters, broken saw teeth, etc., and will deflect sawdust away from the operator. The sides of the lower exposed portion of the blade shall be guarded to the full diameter of the blade by a device that will automatically adjust itself to the thickness of the stock and remain in contact with stock being cut to give maximum protection possible for the operation being performed.

### **Powered Industrial Trucks / Forklifts / Lulls (29 CFR 1910.602 and 29 CFR 1910.178)**

Powered Industrial Trucks (including Forklifts) shall be operated in accordance with the requirements of **OSHA 29 CFR 1910.178**.

The General Contractor for the site is responsible for the safe operation of the powered industrial trucks. The General Contractor shall insure that the following requirements are met;

- The operator is capable of operating the forklift
- The Operator has a current drivers license
- The operator has proof of training, and documentation to prove successful completion of a class, such as a certification card

- The powered industrial trucks used on this job have been inspected by an authorized representative of the manufacturer within the last year
- All manuals, tags, labels and warnings are in place on the truck, and legible
- The powered industrial truck has been evaluated for operation within the building
- The General Contractor shall verify that the Powered Industrial Truck will not exhaust carbon monoxide into the building by use of either;
  - Catalytic Converter (in place)
  - Carbon Monoxide (CO) Monitors

Lifts used inside shall have carbon monoxide scrubbing systems or be properly exhausted to prevent carbon monoxide accumulation.

### **Roadway Safety**

**(FHWA and MUTCD)**

In accordance with the OSHA Memorandum of Understanding (MOU) General Duty Clause of December 2002, the construction industry safety standards require that traffic control signs, signals, barricades or devices protecting employees and the public shall conform to either;

- Federal Highway Administration (FHWA) Manual on Uniform Traffic Control Devices (MUTCD), 1988 edition, or
- Federal Highway Administration (FHWA) Manual on Uniform Traffic Control Devices (MUTCD), Millennium edition
- Roadway safety specifications shall meet the requirements of the local police department.
- Before any road work is initiated, plans and modifications must be approved by the local and/or state police
- In areas where vehicle traffic is present, the following minimum requirements shall be followed;
- Barricades or suitable warnings shall be set up to properly make vehicle operators aware of the excavation and work personnel
  - Appropriate signage shall be used as part of the hazard identification
- Personnel in the roadway shall don appropriate vests or other suitable means of identification. The use of brightly colored (orange, yellow or bright green) clothing such as tee shirts is acceptable. However, during inclement weather, or for work activities after dark, the use of a lime green / yellow vest with reflective stripes is required.
  - Adequate and appropriate lighting and warnings with suitable reflective striping must also be incorporated

## Scaffolds and Staging

(29 CFR 1926.451 and 29 CFR 1910.28)

Scaffold systems shall be constructed and maintained in accordance with the requirements of OSHA and ANSI A10.8 - 1988

- Scaffolds shall be constructed in accordance with the requirements of manufacturer's specification.
- At all times, during the erection of the scaffold system,
- The "competent person" for the company building the scaffold system shall remain on site.

\_\_\_\_\_  
Name Contractor (\_\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_  
Cell Phone #

- Scaffold systems  $\geq 125'$  in height must be approved by a Registered Professional Engineer.
- Scaffold systems shall not be placed within 10' of a power line, unless properly protected, or the power source de-energized.
- All scaffolds and staging must be protected from vehicular damage, by means of a barrier
- If the height to base ratio is  $> 4:1$ , the scaffold system must be physically restrained from tipping
  - Anchors to building must not exceed 30' horizontally or 26' vertically
- Footing shall be set upon sound, rigid and suitable objects, not barrels, boxes, brick or other unstable objects
- Screw jacks shall not extend more than 12" below the bottom of the nut or top of caster
- Access to upper levels of scaffold systems shall be made by anchored portable ladders, a fixed ladder, ramp or runway with guard and handrails, stairway, or a legitimate built-in ladder frame on the sides of the scaffold that are  $\geq 10"$  wide and  $\leq 16.5"$  in height
- Top rails shall be between 36 – 45" in height above work surface
- Mid rail must be between 18 – 22 ½" in height
- Toe boards must be a minimum of 3 ½" above the work surface
  - When any materials are placed above the level of a toe board, inclusive of bricks and tools, an appropriate guard or shield must be installed to prevent items from falling over the edge.
    - Plywood or another substantial barrier
- All wall and work surfaces shall be fully decked, with no space (except around roles) greater than 1"

- “Approved” planks must bear the label, mark, seal or stamp of a recognized agency such as ANSI or OSHA
- Planks cannot be painted or covered, as this may conceal deficiencies
- Planks cannot have large knots, excessive grain slope, checks, cracks, decay, insect damage.
- “Approved” planks must lap end supports or bearers
  - Platforms < 10’ long shall have planks that are > 6” or ≤ 12”, unless cleated or otherwise restrained
  - Platforms > 10’ long shall have planks that are ≥ 12” or ≤ 19”, unless cleated or otherwise restrained
- If planks are abutted, the ends shall rest on separate support surface
- Overlap should only occur over supports, and shall not be less than 12”, unless platforms are nailed together or otherwise restrained.
- Walk / work surfaces must be free of burrs, nails, sharps edges, snow and ice, grease, mud and oil, and any other material or items that make it unsafe. There should be no slip, trip or fall hazards.
- All doorways shall be properly and completely protected from the potential hazard of falling items

## **Site Security**

### **Pedestrian, Personnel and Vehicle Protection**

- The General Contractor shall discuss site security and personnel and vehicle safety with the owner, or the owner’s representative before any work is initiated.
- It is the responsibility of the General Contractor to, when necessary, meet with and address any issues that may fall under the jurisdiction of the local fire and police departments.
- The General Contractor shall take steps necessary to protect the public and maintain work areas that meet or adjoin public ways, sidewalks, building entrances (aisles, corridors, lobbies and other common areas), stairways and roads.
  - The contractor shall erect, install and maintain the appropriate barricades, barriers, fences, guardrails, overhead protection, partitions, signs, shields, and/or other interim controls protect the health, safety and well-being of the general public.
    - Warning signs must be conspicuously posted and adequate in number for protection of the general public.
    - When signs used for exits must be temporarily blocked or obstructed, the signs shall be covered or otherwise blanked to prevent use.

- Temporary exits shall be identified from the former exits with new signage with directional arrows to permit safe egress of the public and workforce.
  - The Exit signs shall be red or green in color, with each letter at least 6" in height with a 3/4" stroke (width).
- Work shall only be performed during appropriate hours, subject to the requirements of the city or town, and as specified by contract.
- All guardrails to protect the general public and workforce from the potential of fall shall be of adequate strength, and shall be able to withstand a down and outward pressure of 200lbs, in accordance with OSHA

**Smoking**

Smoking is not permitted in the building under construction, or within \_\_\_\_\_ 'of the building. A designated smoking area has been identified, away from all potential hazards.

The smoking area is located in the following locations:

- \_\_\_\_\_
- \_\_\_\_\_

**Steel Erection**

**(29 CFR 1926.750 - 29 CFR 1926.761)**

Steel Erection Company: \_\_\_\_\_

"Competent Person": \_\_\_\_\_ (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

- A pre-planning meeting is required for steel erection and the use of overhead cranes. The general contractor, appropriate sub-contractors and all other parties responsible for the work shall meet, review and modify as necessary all aspects of the site steel erection, before work is initiated.
- A Site-Specific Erection Plan with alternate means and methods must be provided.
- Pre-construction conferences and site inspections must be held between the Steel Erector, the General (controlling Contractor) and all applicable Project Engineers and Fabricators before starting the steel erection.



- The Controlling Contractor must provide a written notification to the steel erector insuring that;
  - Concrete footings, piers and walls have cured to a level that will provide adequate strength to support any forces imposed during steel erection.
  - Anchor bolt repairs, replacements and modifications were done with the approval of the Project Structural Engineer of Record.
  - A site-specific erection plan is developed during one or more pre-construction conference and site inspections involving the erector, the controlling contractor and others such as the project engineer and the fabricator.

## Steel Erection Training

Employee training for all aspects of steel erection must be provided by a qualified person. It must include as a minimum;

- recognition and identification of fall hazards
- use and operation of protective systems and equipment
- protection from falls
- site inspections and safety requirements
- multiple-lift rigging
- correcting
- hoisting
- hooking and unhooking
- Before authorizing the steel erection, the General Contractor shall ensure that the Steel Erector has the following written notifications;
- Commencement of Steel Erection – Proof that the concrete meets the ASTM standards for strength. Site Layout of the project for roads, equipment movement and stability of area for operation of cranes
- Pre-Planning of Overhead Hoisting Operations
- Site Specific Erection Plan
  - Sequence of steel erection activity
  - Description and operation of cranes, and derricks to be used on site
  - Including the pre-shift visual inspection of the equipment referenced above
  - Description of steel erection activities and procedures shall include;
    - identification of the Qualified Rigger:
    - including multiple lift rigging methods, procedures and requirements
    - employee and pedestrian safety under and around the work area
    - maintaining walk / work surfaces
    - metal decking handling procedures



- protection of floor, roof and wall openings
- column anchorage procedures
- beam and column requirements
- open web steel joists installation and safety
  - hooking and unhooking loads
  - initial corrections

## Steel Erection Fall Protection

All employees on a walk / work surface with an unprotected edge >15' above the lower level is must be protected by the conventional fall protection, unless a lower level is specified by the owner, General Contractor and/or the steel erector.

Connectors must be protected by conventional fall protected by conventional fall protection when working on surface with an unprotected edge that is more than 2 stories or 30' above a lower level

- Perimeter Safety cables must be installed at the final interior and exterior perimeters of multi-story structures, as soon as the decking has been installed
  - While working at heights between 15' - 30' , connectors must be provided with a complete personal fall arrest system or other allowable fall protection, and wear the equipment necessary for tying off.
  - Controlled Decking Zones (CDZ) can be established as a substitute for fall protection where metal decking is initially being installed and forms the leading edge of a work area >15, ≤30' above the lower level.
    - Employees who are not engaged in leading edge work and properly trained in the hazards involved, are prohibited from entering the CDZ.
      - CDZ cannot be >90' x 90' from any leading edge
      - CDZ shall not exceed 3,000 square feet of unsecured decking
      - CDZ must be clearly identified
        - contrasting flags space every 6'

Description of fall protection procedures to be used on site

## **Vehicle Operation Safety**

**(29 CFR 1929.600 - 29 CFR 1926.601)**

All vehicles, regardless of size shall be operated by a competent, licensed operator in accordance with the requirements of the appropriate state, Department of Transportation (DOT) and Registry of Motor Vehicles (RMV).

Any vehicle greater than 26,000lbs, or as specified by the owner, general contractor shall have operators who are evaluated randomly, or as needed for alcohol and drugs as specified by the Department of Transportation.

- Any operator, believed to be under the influence of alcohols, drugs or other medication (including over-the-counter) cough/cold and/or sleep medications shall be removed from vehicle operation, tested in accordance with the DOT and, if determined to be under the influence, shall be driven home by a means other than by themselves in their respective vehicle.
- Any vehicle greater than 10,000 lbs or higher.
- Vehicles shall be inspected, repaired or serviced by qualified mechanics / personnel.
- All vehicles shall be inspected before each shift by the operator / competent person. All safety issues shall be immediately repaired, or the vehicle removed from service and labeled as out-of-service to prevent unauthorized operation or use.
- Vehicle operators shall not, while driving, utilize cell phones or consume food and/or beverages.
- Vehicle operators shall not operate vehicles unless seat belts are in use
- Vehicles used for the transport of materials shall have the materials properly secured and/or covered.
  - Dump trucks shall utilize covers or tarps when transporting any material over a public way
  - Gas cylinders shall be transported in the upright position, and shall be secured by chain or strap
- Vehicles in tow shall be attached by solid bar, not by chain
- All construction vehicles shall be equipped with the appropriate, charged, inspected and conspicuously placed fire extinguisher
- All passengers in a vehicle shall be seated and shall wear seat belts
  - Personnel shall not be permitted to ride in the cargo area or pick-up body regardless of length of trip.

Motor Vehicles/Construction Vehicles that are incapable of being driven at a speed of 12MPH and which are used exclusively for building, repair and maintenance of

highways, shall not apply to sections of Chapter 90 of Massachusetts General Law, and as such are not considered to be motor vehicles.

- Vehicles not in use shall have the keys removed from the ignition, and placed in a safe location to prevent unauthorized use.
- The General Contractor is responsible for the placement and security of all vehicles on the construction or project site.

## **Weather Conditions**

### **Spring**

- Thawing – ground that was once frozen may now be subject to thawing action. Care must be taken when placing heavy loads on ground level that may shift due to thawing action.

### **Summer**

- Heat Related Illnesses – the Emergency Action Plan must be kept up to date in order to handle heat related illnesses such as heat exhaustion and heat stroke which may arise in the summer months.
  - First Aid – members of the Emergency Action Plan must be properly trained in order to handle such heat related illnesses.
  - Drinking Water – adequate potable drinking water must be provided on site so that the workers can drink ample fluids throughout the day.

### **Autumn**

- Housekeeping – fallen leaves, branches, limbs, etc... that may create a housekeeping situation on must be cleaned up before it creates a slip/fall hazard.

### **Winter**

- Clothing – adequate layers of clothing must be worn so that the workers are adequately protected from frigid conditions.
- Snow and Ice – all outside work areas, walkways, sidewalks, etc... must be properly cleared, sanded/salted and maintained to prevent a possible slip hazard.
- Cold Related Illnesses – the Emergency Action Plan must be kept up to date in order to handle cold related illnesses such as frostbite and hypothermia, which could arise during the winter months.

- First Aid – members of the Emergency Action Plan must be properly trained in order to handle cold related illnesses.
- Building Access – if permanent elements of the building design is missing during construction (i.e. snow guards, gutters, canopies, etc...), then attention should be given to those accessible areas around the building perimeter in order to deal with the elements such as rain, freezing rain, ice and snow.

## V. TRAINING

### Employee Training

(29 CFR 1926.21)

Training must be provided by competent personnel.

Training must be provided for all personnel, specific to the types of work being performed by same.

- Training must be provided for, but shall not be limited to; Fall Protection, Fork Lifts, Lockout/Tagout, Personnel Lifts, Respiratory Protection.

Specific types of training such as those referenced above are not included in a typical 10hr or 30 hr OSHA Class and must be conducted as a stand alone class in accordance with the requirements of the Occupational Health and Safety Administration (OSHA).

Most training can be provided by the General Contractor through “Tool Box” talks, training or similar. The General Contractor must have proof of training, which can include, but is not limited to:

- Sign-in sheets
- Quizzes
- Training can also be provided by an outside agency or company with special knowledge on the topic being covered.
- Trainer must be competent in the subject material
- Sign in sheets or quizzes can be used for record of attendance
- Trainer providing the information shall provide a copy of training documentation, including information covered

A copy of the training documentation and the accompanying rosters should be maintained by the General Contractor

The Tool Box / Training Sessions for this project or site shall be held on;

**Day of the Week** \_\_\_\_\_ at \_\_\_\_\_:\_\_\_\_\_ am / pm

### **New Employees**

New Employees will also be provided with a copy of their employers health and safety manual at the time of hire. All new employees will be provided with new employee orientation training for the type of work that they will be initially performing. New Employee training must cover the following topics, and shall be provided at time of hire, before any work is initiated;

- Hazard Communication and Right-to-Know Training
- Emergency Action Plans and Procedures
- Personal Protective Equipment
- All other applicable work-related activities that they will encounter on their first 3 days of work

It shall be the responsibility of the project superintendent or their designee to monitor the activities of the new employee, and not permit them to work in areas or under circumstances that they are not qualified to do.

A Safety Training Checklist shall be maintained to monitor levels of training and the tasks to which the person can be assigned.

### **Job Hazard Analysis (JHA) or Job Safety Analysis (JSA)**

A JHA or JSA shall be developed for all non-routine activities, as well as for major construction operations. The Analysis shall be performed by a competent person, and shall be appropriately documented. A copy of the JHA / JSA shall be provided to the company safety officer or their safety representative.

The JHA or JSA is performed to be used as an operating procedure, and shall be made available for review and training for personnel performing the identified work.

- A copy of the JHA / JSA shall remain on site.

# **Appendices**

- (A) [Emergency Action Plans](#) -*Sample*
- (B) [Evacuation Plans](#) - *Sample*
- (C) [Accident/Incident Reports](#) - *Sample*
- (D) [Emergency Numbers](#) – *Sample*
- (E) [Site Specific Safety Plan Checklist](#) – *Sample*
- (F) [Dig Safe Notification Form](#) - *Sample*

## **Sample Emergency Action Plan (EAP)**

An Emergency Action Plan (EAP) is required and shall be implemented on every project, as outlined by the General Contractor. Proper plans, procedures and protocols shall be in place and posted before any project is initiated.

The General Contractor shall perform a risk / all hazards assessment of the project to best determine possible scenarios and response actions, and shall provide the necessary training before beginning work.

In most cases, building evacuation will be necessary, such as for fires, smoke conditions, building instability or collapse, chemical or odor concerns, carbon monoxide etc. In each case, evacuation from the building (at least 50') shall be required.

Emergency Air Horns shall be placed with fire extinguishers at every exit door and shall be maintained. One long blast for fire, all other emergencies should be multiple blasts.

Because life safety on site is the most important concern, everyone should leave the building. After evacuation, a designated person shall notify the local fire department, ambulance service, police department and owner from a safe location.

After Emergency Services are notified;

- Contact one of the companies (General Contractor and Subcontractor) for reasons of accountability and personnel safety.
- All evacuees shall be at least 50' from the building, until allowed to re-enter at the discretion of the incident commander / fire officer.

- No person shall re-enter the building until the fire alarm / horn has been reset or the fire department has permitted re-entry.

**The Contact Persons for this site are;**

**Primary Group**

---

Name

---

Title

(        )        -       

Cell Phone #

**Secondary Group**

---

Name

---

Title

(        )        -       

Cell Phone #

The *Emergency Action Team* shall consist of:

**FIRST TEAM**

- Person 1A – Superintendent
- Person 1B – Engineer
- Person 1C - Foreman

**SECOND TEAM**

- Person 2A -
- Person 2B -
- Person 2C -

In case of any type of emergency, including a fire emergency, the *Emergency Action Team* shall be contacted immediately. All lines of emergency communications will then be transmitted on Channel 2 so that the work effort may continue on Channel 1. The duties of each individual are as follows:

- Person 1A (Person 2A): At the time of an accident, Person 1A (Person 2A) will immediately report to the scene of the accident. Person 1A (Person 2A) will direct all supervisory personnel on the project on what must be done at the time of the emergency. He/She will also direct outside Emergency Medical Teams such as the Fire Department, Ambulance, EMT's, and any other outside rescue services to the scene of the accident. In case of fire, Person 1A (Person 2A) will direct all fire fighting apparatus to the scene of the fire and will direct any other outside vehicles that arrive on-site to assist in the effort. Again, he/she will direct all supervisory personnel on the project with regard to this emergency.
- Person 1B (Person 2B): At the time of an emergency, Person 1B (Person 2B) will immediately go to the scene of the accident. Person 1B (Person 2B) will immediately take charge of the scene and will provide medical treatment to any minor injury.

In addition, Person 1B (Person 2B) will also provide assistance to any Emergency Medical Teams that arrive to handle such injuries, if required.

- Person 1C (Person 2C): Person 1C (Person 2C) will first dial “911” in the event of an emergency. He/She will then assist in directing all rescue teams and assist Person 1B (Person 2B) in treating the injured. In case of a fire, he/she will contact the local fire department. Again, Person 1C (Person 2C) will assist in directing all emergency teams to the scene of an emergency and/or fire and will assist in treating any type of emergency related injuries.

The Project Manager, (Person 1D), will be the designated spokesperson when dealing with the press.

### Emergency Telephone Numbers

- **Police**                    **911** or (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_
- **Fire**                        **911** or (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_
- **Ambulance**            **911** or (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_
- **Hospital**                 **911** or (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_



## **FIRE EVACUATION PLAN**

In case of a Fire Emergency, exit the building/project immediately.

As you are exiting, the first person to reach one of the fire Emergency Air Horns should sound the horn and continue to exit the building. # \_\_\_\_\_ blast of the air horn indicates an emergency and everyone is required to evacuate the site immediately.

Fire Emergency Air Horns are located at the main entrances to the building construction. Please be aware that these locations will change throughout the construction process, so make yourself aware of the locations **BEFORE** an emergency.

If you are unable to reach a Fire Emergency Air Horn within the building, continue to exit the building and report immediately to the DOC trailer, where a reserve Fire Emergency Air Horn will be sounded.

When the Fire Emergency Air Horn is sounded:

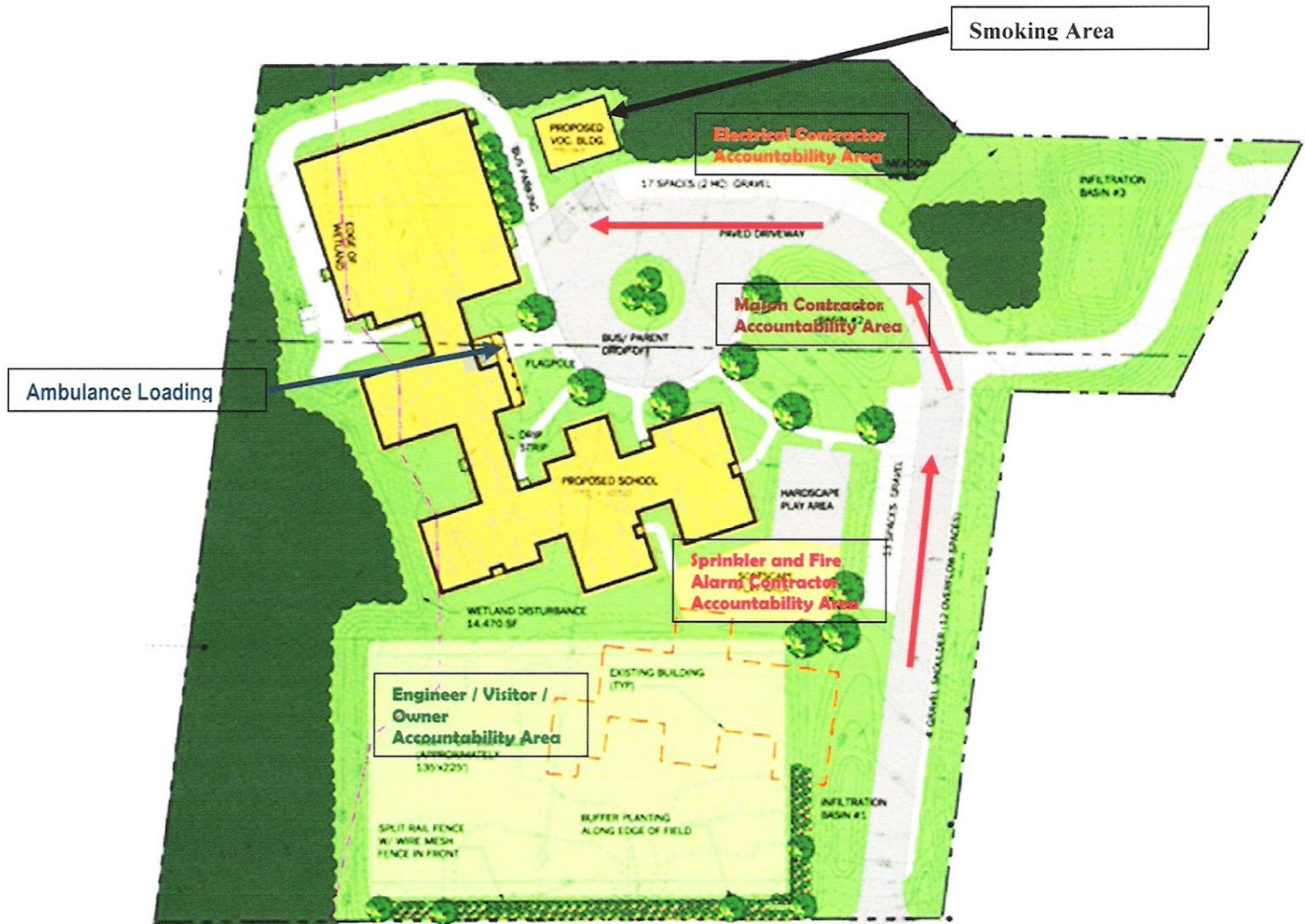
### **ALL WORK ON THE SITE IS TO STOP**

EVERYONE is to report to the front of the project trailer for a head count. It is the responsibility of every foreman for all contractors on site to ensure that everyone in their crew is accounted for and to report this information to the Superintendent.

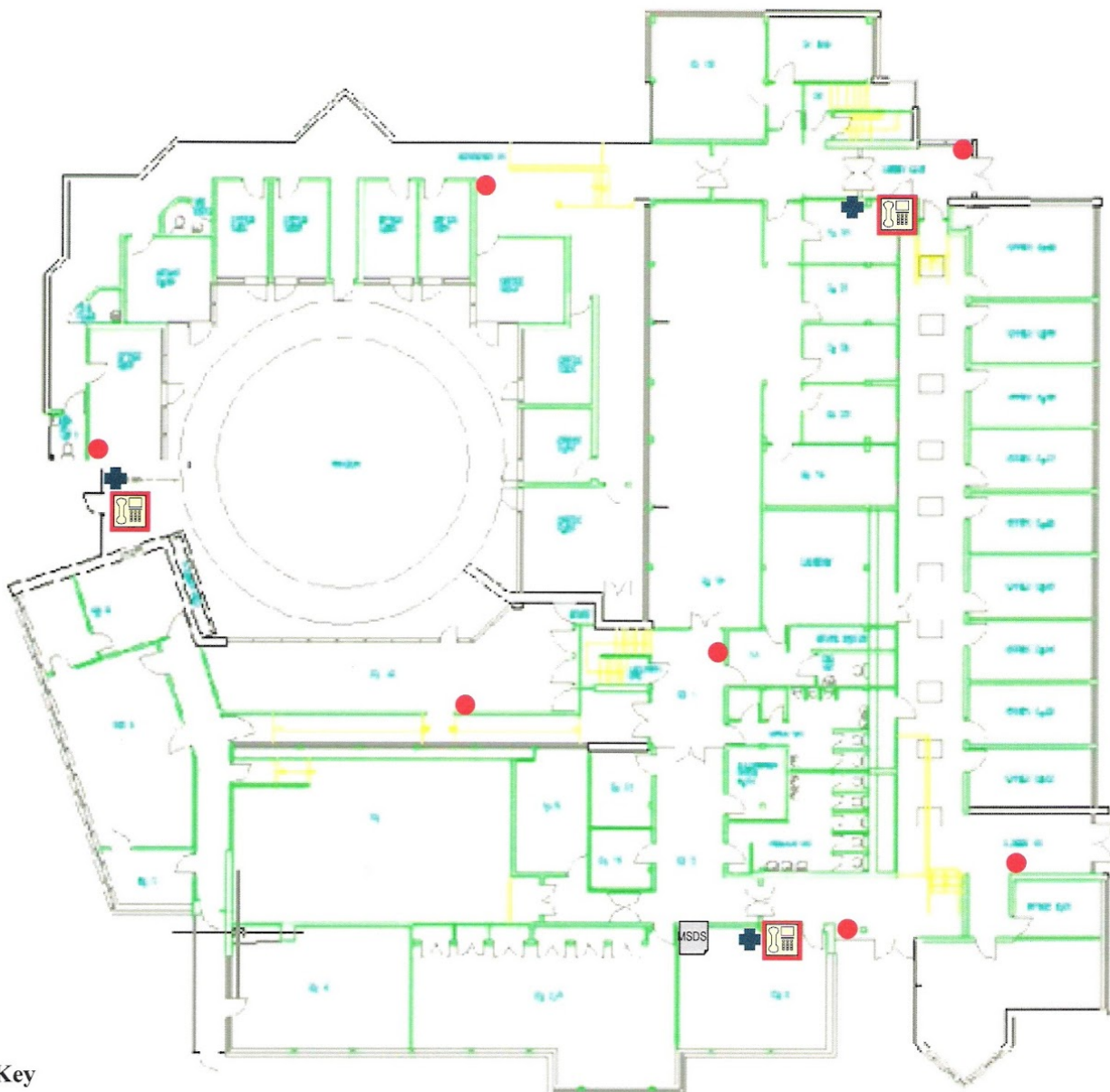
PLEASE NOTE: it is imperative that Foreman take an accurate headcount at the beginning of each work day to ensure an accurate head count in case of an emergency.

Everyone should remain in front of the trailer or an area designated by the emergency response team until such time that the Fire Emergency is under control.





# Building/Site Evacuation Map and Accountability Areas with Emergency Vehicle Access and Fire Extinguishers and First Aid Stations



# Sample Site Evacuation Plan



**Key**

	Emergency Phone - 911
	Fire Extinguisher 10lb ABC
	First Aid Kit
	Material Safety Data Sheets

# Sample Emergency Equipment Plan

# Incident Report

To be filled out within 24 hours of incident

<input type="checkbox"/> Recordable	<input type="checkbox"/> Illness
<input type="checkbox"/> Non-Recordable	<input type="checkbox"/> Injury
	<input type="checkbox"/> Hazardous Incident

<input type="checkbox"/> Full Time	<input type="checkbox"/> Part Time	<input type="checkbox"/> Casual	<input type="checkbox"/> Student
------------------------------------	------------------------------------	---------------------------------	----------------------------------

Name: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_  
Last Name First Name M.I.

Dept: \_\_\_\_\_ Sub. Dept: \_\_\_\_\_ Job Title: \_\_\_\_\_  
Date of Hire

INCIDENT DATE: \_\_\_/\_\_\_/\_\_\_ INCIDENT TIME: \_\_\_ A.M./P.M.

Room: \_\_\_\_\_ Building: \_\_\_\_\_ Area: \_\_\_\_\_

BODY PART INJURED: \_\_\_\_\_ INJURY TYPE: \_\_\_\_\_ ACCIDENT TYPE: \_\_\_\_\_

Injury Caused By: \_\_\_\_\_ Equipment/Manufacturer: \_\_\_\_\_ Model #: \_\_\_\_\_ Serial #: \_\_\_\_\_

Chemical/Cleaning Agent or Hazardous Material Involved: \_\_\_\_\_ Was Personal Protective Clothing/Equipment Used? \_\_\_\_\_

If so, what? \_\_\_\_\_ Property Damage: \_\_\_\_\_ Describe Damage: \_\_\_\_\_

INJURY REPORTED TO: \_\_\_\_\_ Date: \_\_\_/\_\_\_/\_\_\_ Time: \_\_\_\_\_ A.M./P.M.

Task being performed at the time of incident: \_\_\_\_\_  
 Employee's supervisor - complete the following

Ambulance Requested:  Yes  No First Aid Provided (excluding ambulance personnel): \_\_\_\_\_ By Whom: \_\_\_\_\_

Transported to: \_\_\_\_\_ Incident Cause:  Unsafe Act  Unsafe Condition  Unsafe Equip  No Training  Poor Hskp  Material Handling  Other

Incident Investigated by:  Human Resources  Campus Police  Safety Officer  Supervisor  Other Date of Investigation: \_\_\_/\_\_\_/\_\_\_

Name of Investigator(s): \_\_\_\_\_ Time of Investigation: \_\_\_\_\_ A.M./P.M.

Witnesses: \_\_\_\_\_

Does Incident Warrant Further Investigation?  Yes  No By Whom?  Dept. Head  Human Resources  Safety Officer  Supervisor

Mandatory Field -  
 Events and conditions that contributed to the incident: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Mandatory Field -  
 Supervisor recommendation(s) for corrective action: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

\_\_\_\_\_  
 Employee's Signature Date Supervisor's Signature Date  
 \_\_\_\_\_  
 Safety Officer's Signature Date President / CEO's Signature Date

# EMERGENCY & BUSINESS TELEPHONE NUMBERS

**EMERGENCY....DIAL 911 OR ( ) \_\_\_\_\_ - \_\_\_\_\_**

- **AMBULANCE** \_\_\_\_\_
- **FIRE** \_\_\_\_\_
- **POLICE** \_\_\_\_\_
- **POISON CONTROL CENTER** 1 (800) 682-9211

## Inspection Services

- Building Inspector \_\_\_\_\_
- Electrical Inspector \_\_\_\_\_
- Fire \_\_\_\_\_
- Plumbing Inspector \_\_\_\_\_
- Public Works \_\_\_\_\_

Dig-Safe 1 (888) DIG-SAFE

OSHA (Western Massachusetts) 1 (413) 785-0123  
 -Massachusetts Consultation Services 1 (617) 969-7177

MA Labor & Workplace Development 1 (413) 747-7192

MA Dept. of Environmental Protection 1 (413) 784-1100

## Site Specific

	<u>Company</u>	<u>Supervisor</u>	<u>Telephone</u>
Architect/Engineer	_____	_____	( ) ____ - ____
Owner's Project Manager	_____	_____	( ) ____ - ____
General Contractor	_____	_____	( ) ____ - ____
Contractor's Project Manager	_____	_____	( ) ____ - ____
Contractor's Superintendent	_____	_____	( ) ____ - ____
Fire Detection Contractor	_____	_____	( ) ____ - ____
Fire Suppression Contractor	_____	_____	( ) ____ - ____
Plumbing Contractor	_____	_____	( ) ____ - ____
Environmental Health & Safety	_____	_____	( ) ____ - ____



# Site Specific Safety Plan

Building: \_\_\_\_\_ Site Address: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

**Permits** (Posted)

Building (Alteration / Construction / Demolition / Renovation / Repair)   
  Confined Space (Permit / Non-Permit)   
  DEP (Permit for Demo)  
 Dig Safe   
  Electric   
  Excavation   
  Fire (Dumpster / Gas / Hot Work / Salamanders / Tar Kettles)   
  Gas / Plumbing

City / Town Noise Restrictions – Permitted hours of operation are: \_\_\_\_:\_\_\_\_ am / pm - \_\_\_\_:\_\_\_\_ am / pm

**Postings** (Federal and State)

Accident/Incident Reporting   
  Equal Employee Opportunity   
  Evacuation Plans   
  Fair Labor   
  Family/Medical Leave  
 OSHA   
  OSHA 300   
  Prevailing Wage   
  USERRA 38 U.S.C.   
  Other: \_\_\_\_\_

**Site Security**

Fence/Gate   
  Hard Hats   
  Eye Protection   
  No Trespass   
  Other: \_\_\_\_\_  
 Site security (including off-hours) is the responsibility of the General Contractor.  
 Verify Emergency Vehicle access to construction site.

**Equipment / Material (Alternate) Storage Area:** \_\_\_\_\_

Flammable / Combustible Gases and Liquids    Other Hazardous Equipment / Materials: \_\_\_\_\_

**Training Certificates, Licenses and Documentation** (sign-ins)

Asbestos/Lead   
  Confined Space   
  First Aid/CPR   
  Fork Lift   
  Hazard Com   
  Laser(s)  
 OSHA 10hr/30hr   
  Respiratory Protection   
  Scaffold/Staging   
  Steel Erection   
  Other: \_\_\_\_\_

**Safety Meeting / Training** (Day of Week and Time):    Day: \_\_\_\_\_    Time: \_\_\_\_\_     Incident Reports to Owner

Owner Specific Training Requirements: \_\_\_\_\_

**Special Concerns**   
 Asbestos (caulk, glaze, pipes, plaster etc)   
 Dust (Nuisance)   
 Lead   
 PCB's (caulks and oils)  
**Health and Sanitation**   
 Site Housekeeping   
 Sani-Cans   
 Water and Cups   
 Other: \_\_\_\_\_  
**Traffic Control**   
 Barrels/Cones (10' apart)   
 Flagger(s)   
 Police Officers   
 Vests

**SAFETY SECTION**

**Required Policies and Procedures**

Company Env., Health & Safety Manual   
 Site Specific Env., Health & Safety Manual   
 Owner's Env., Health & Safety Manual  
 Confined Space   
 Emergency Action Plan   
 Exposure Control/Blood Borne Pathogens   
 Excavations/Trenching   
 Fall Protection/Staging  
 Fork Lifts   
 Hazard Communication   
 Hot Work/Gas   
 Electrical/Lockout/Tagout   
 Ladders   
 PPE/ Respiratory Program  
 OSHA (10 most cited issues) - **Green Font**  
**Cranes / Lifts / Hoists**   
 Training / Certificates   
 Equip Inspected   
 Lift Plans Approved   
 Fall Protection  
**Electrical Safety**   
 Electrical/Ext Cords   
 No Trip/Fall Haz   
 Grounding Pins   
 GFCI's in Use and Tested  
**Emergency Action Plan**   
 Accountability System   
 CPR/1st Aid   
 Fires, Alarms/Evacuation   
 Extinguishers/1<sup>st</sup> Aid Kits   
 2 Egress/Floor  
**Excavations / Trenching**   
 Shore/Slope/Box   
 Spoils (>3')   
 Ladders (25')   
 4 gas Monitor   
 Warning Lines or Guards  
**Fall Protection (> 6')**   
 Guards/Toeboards   
 Warning Lines   
 Holes >2" Covered   
 Roof Precautions (Guards / Monitors)  
**Hot Works**   
 Permits   
 Equip Inspected   
 Fire Extinguishers   
 Fire Watch   
 Housekeeping  
**Ladders**   
 Step (open / locked)   
 Extension 1:4   
 3 – 5 Rungs above   
 Ladder tied off   
 Inspected  
**Laser(s)**   
 Class \_\_\_\_\_ Laser   
 Required Signs   
 Required Eye/Face Prot.   
 Other: \_\_\_\_\_  
**Lighting / Signage**   
 Adequate Day/Night   
 Exits (2' AFF)   
 Emergency Lighting  
**Personal Protective Equip.**   
 Eye/Face Protection   
 Foot Protection   
 Head Protection   
 Hearing Protection   
 Respiratory Prot.  
**Power Tools**   
 GFCI Protected   
 Guards   
 Push Sticks   
 Inspected   
 Serviced  
**Scaffolding / Staging**   
 Competent Person   
 Setup (Proper)   
 No Floor / Fall Openings   
 Rails/Toeboards/Guards   
 Housekeeping  
**Steel Erection**   
 Competent Person   
 Fall Protection Requirements   
 6'   
 15'   
 30"  
**Walk / Work Surfaces**   
 Proper Housekeeping   
 Floor Openings   
 Wall Openings/Guards

**ENVIRONMENTAL SECTION**

**Backflow Requirements**   
 Backflow Devices in Use  
**Dust Control**   
 Type of Dust: \_\_\_\_\_   
 Permits   
 Water Mist/Engineering   
 Enclosed Chute (>45 deg)   
  
**Hazardous Material/Waste**   
 Notify Owner   
 Report Leaks   
 Universal Waste (bulbs, ballasts etc)   
 Covers / Labels /Containment  
**Storm Water Controls**   
 Storm Water Mgr   
 Permits   
 Run-off Control   
 Drain Covers / Filters   
 Street Sweeping  
**Volatile Organic Cmpd VOC**   
 Hazard Reduction   
 PPE/Respirator   
 Engineering Control   
 Fire and Safety Procedures

**Dig Safe Notification Form**

**Before you dig...Contact Dig Safe**

In Maine / Massachusetts / New Hampshire / Rhode Island / Vermont ..... (888) DigSafe or (888) 344-7233

In Connecticut (BUD) ..... (800) 922-4455

In New York State ..... (800) 962-7962

Long Island ..... (800) 272-4480

**Site Superintendents**

Please complete the required notification from below, before contacting Dig Safe or other appropriate agency. As the site superintendent, you are required to make sure that the area has been pre-marked in white, with excavator company's name or logo before notification is made. The original form with Dig Safe approval number(s) must be kept on the job site, with a copy provided to the safety department

**The excavator is required to maintain all required markings.**

Request File Number \_\_\_\_\_ Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Time: \_\_\_\_:\_\_\_\_ am/pm

State: \_\_\_\_\_ City or Town: \_\_\_\_\_

Project Name: \_\_\_\_\_

Address/Location: \_\_\_\_\_

Intersecting Street: \_\_\_\_\_

Type of Work: \_\_\_\_\_

Depth of Work: \_\_\_\_\_ (in Feet)

Excavation Company: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

Utilities notified by Dig Safe: \_\_\_\_\_

Utilities notified by General Contractor and Owner: \_\_\_\_\_

*Dig Safe is not responsible for utilities not installed or maintained by the above, such as those installed by the owner. The General Contractor and Owner is not responsible for these.*

Remarks: \_\_\_\_\_

Dig Safe Approval Number: \_\_\_\_\_

Start Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Start Time: \_\_\_\_:\_\_\_\_ am/pm

Emergency

**Yes / No**

Name of Requester: \_\_\_\_\_ Title: \_\_\_\_\_

Company: \_\_\_\_\_

*The Dig Safe File number is good for thirty (30) days. If your Dig Safe number has / will expire, then contact Dig Safe for a new file number if you are planning to start or continue work after day 30.*

*In accordance with Massachusetts General Law (MGL Chapter 82, Section 40) a person or company who violates any provision of this section can be fined between \$1,000.00 (1<sup>st</sup> offense) to \$10,000.00 (2<sup>nd</sup> offense).*