# The Contractor's Guide to Safety

At

# **Bentley University**



Bentley Contractor Safety Guide Revised on 5.18.15

# Contractor Receipt and Acknowledgement of Bentley University Contractor Safety Guide:

General Contractor/ Sub Contractor:	
Date:	
Project Supervisor:	(print)

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#### **Bentley University Safety Policy**

Bentley University is committed to protecting the integrity of the university's human, physical and financial resources. However, it is solely the Contractor's responsibility to ensure that its sitespecific safety and health plan is in conformance with the provisions of the Guidelines and standards set forth under the Williams-Steiger Occupational Safety and Health Act of 1970 as amended, and any other federal, state and local safety and health standards as they apply. The Contractor shall ensure that each of its Subcontractors is provided a copy of their plan and ensure they comply with the requirements of it and these Guidelines.

It should also be emphasized that, as with all other aspects of the work, the Contractor's selection of means and methods is his own, and that any and all suggestions contained in these Guidelines are only representative of the types of techniques and practices which the Contractor may choose to employ on this project.

In addition, Contractors on the Bentley campus are expected to:

- Furnish a workplace free from recognized hazards which are likely to cause death, injury or illness.
- Comply with Federal (OSHA & EPA), State (DOLWD & DEP) and Local laws and regulations set forth pertaining to Environmental, Fire and general Safety and Health.
- Recognize that Safety and Health issues are accepted as a high-priority concern at Bentley University.
- Hold every employee and subcontractor accountable for attending Safety training as required by applicable OSHA and EPA regulations, and to comply with all Safety policies and procedures as necessary.
- Develop and implement a site-specific safety and health plan outlining specific Safety requirements adopted for work at Bentley University.

#### **Important Phone Numbers**

Facilities Management Department 781-891-2436 (Main Number) 781-891-2208 (Work Control Center) Campus Police (Business number) 781-891-2201 (Business number) 781-891-3131 (Emergency number) Life Safety Services 781-891-2281 Environmental Health & Safety Specialist II 781-891-3448

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# A. Introduction

The main objective of the Bentley University "Contractor's Guide to Safety" is the prevention of injury. It is mandatory that you, as a contractor, and all of your employees including sub-contractors read and follow the contents of this pamphlet as well as comply with all federal, state, local, and Bentley University safety and health code requirements.

Prior to starting a construction project at Bentley University, the Facilities Management Department Project Manager (PM) and the Life Safety Services (LSS) manager will meet with the contractor's to ensure that all necessary fire, health and safety precautions, permits and submittals are coordinated, completed, reviewed and approved. The Contractor's Supervisor must enforce the following policies listed herein to all employees and subcontractors.

This pamphlet is intended to protect Bentley University staff, faculty, students, and the general public from the hazards created by construction and maintenance activities, as well as to protect workers from the hazards of the surrounding environment.

# **B.** General Safety Rules

- These requirements are not to be considered all-inclusive.
- The general contractor acknowledges the responsibility to communicate the safety requirements listed herein to all their employees as well as subcontractor employees.
- The contractor must provide written proof of current workers compensation and general liability insurance before beginning work on Bentley University property.

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- The Director of the Facilities Management Department, each designated project manager and the Life Safety Services (LSS) Department staff, has the authority, but not the obligation, to verbally halt any contractor from conducting work when a contractor disregards any established safety and health standards. If required by the Project Manager, The Contractor shall submit, in writing, procedures to be used to correct violations and safety hazards.
- Emergencies such as fires, flooding, chemical spills, power outages and severe injuries must be reported to Campus Police. This includes any serious accident, whether or not personal injury is involved.
- When working in areas that present safety hazards to personnel, a combination of warning signs, caution tape, high visibility snow fencing and/or barricades shall be placed in effective locations to prevent unauthorized entry.
- Weapons, dogs, illegal drugs, and liquor are not permitted on construction sites, and all speed limits (20 mph), stop and parking signs, and other traffic regulations shall be followed.
- Contractors must consult with the Project Manager and LSS regarding a permit for welding, cutting, open flame use and fire protection system shutdown. Contractors shall coordinate and schedule all required fire watches. Proper exhaust ventilation, filtering of
- welding fumes and safety fire curtains shall be utilized in welding areas. Contractors shall not disrupt normal building operations and functions during welding operations.

Smoking in buildings, including construction sites (interior
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and exterior), is prohibited.

- Suspect and confirmed asbestos-containing materials and lead-based paint shall not be damaged. The Project Manager and LSS shall be contacted for determination prior to the work.
- Contractors shall perform the work in a safe manner that does not impact building occupants.

### C. General Housekeeping Rules

- Aisles, doors, fire extinguishers, eyewash stations, stairways, and other emergency-type equipment shall be kept clear, operational and readily accessible at all times.
- Nails and screws protruding from boards, floors and walls and must be removed.
- Combustible construction scrap material (wood, paper, cardboard, loose stock, etc.) accumulating inside a building shall either be removed daily or placed in a metal container with a tight cover at the end of each workday.
- The contractor shall provide for the collection, segregation, and legal disposal of all hazardous and general waste in compliance with OSHA, EPA, and Massachusetts DEP and/or DOT standards.
- Temporary or permanent overhead storage of debris, tools, equipment, or pipes is prohibited. This includes the area above suspended ceiling panels.
- All walking surfaces shall be free of splinters, nails, or other protrusions, which may cause injury.

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- The work area must be kept as clean as possible at all times.
- Upon project completion, the contractor shall remove excess materials (not designated as attic stock), loose stock, scrap, paints, mastics, cleaning compounds and chemicals the from the Bentley University campus.
- Dust control measures should be used at all times to prevent dust, particulates, welding fumes, smoke, odors and debris from dispersing into occupied areas outside the work area. This includes the use of airtight dust barriers, exhaust fans and HEPA-filtered power tools and equipment.
- Waste oils, light tubes and ballasts shall be carefully collected and stored for recycling by the Contractor to a campus location designated by the Project Manager.

# **D.** Training Documentation and Submittals

- OSHA training Upon request, Contractors shall provide documentation of OSHA training including, but not limited to Hazard Communication and General Safety for each worker.
- Permits Contractors shall obtain and submit documentation of all required Federal, State and local permits, applications, licenses, etc.
- Material Safety Data Sheets (MSDS) Contractors shall maintain on site material safety data sheets (MSDS) for chemicals, gases and other products used on-site. Copies of MSDS shall be made by the Contractor and submitted to LSS upon request.

 Health and Safety Plan - Contractors shall maintain the company's Health and Safety Plan on-site for review by LSS. Upon request, the Contractor shall submit to the Project Manager and LSS written procedures to be utilized on-site including health and safety precautions.

### E. Fire Alarm and Sprinkler Systems

- A 48 hour notification request shall be given to the Project Manager and LSS and approval received by each manager prior to any work pertaining to the shutdown or impact of any fire alarm or sprinkler system.
- No work shall directly or indirectly impact the fire safety detection systems or fire sprinkler systems without the prior approval of the Project Manager and LSS.
- Construction materials or other equipment shall not be placed upon or suspended from any fire detection system or fire sprinkler pipes, valves and supports.
- The Project Manager, LSS and Campus Police shall be immediately notified of any damaged or altered fire sprinkler or fire detection system or equipment.
- All contractors must request a hot work permit from LSS prior to any hot work being done. Hot work includes: welding, open flames, metal cutting, brazing, soldering, or any work which may produce sparks.
- All contractors are responsible for their own fire extinguishers and flame retardant tarps.
- Contractors are expected to follow guidelines on the hot work permit.

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# F. Ladders, Scaffolds and Lifts

- Contractors must furnish OSHA-compliant ladders, staging and other equipment for use by their employees. All such equipment shall be used safely in accordance with manufacturer's guidelines and OSHA standards.
- The use of broken or faulty ladders is prohibited.
- Portable metal ladders must not be used on electrical conductors or equipment, or in the immediate vicinity of exposed electrical conductors. Fiberglass ladders shall only be used in and around electrical equipment.
- Scaffolds and rolling staging shall be installed, used and maintained in accordance with current OSHA standards.
- Mechanical and aerial lifts shall be operated in accordance with manufacturer's guidelines and OSHA standards. The Contractor shall ensure that workers are OSHA trained in mechanical aerial lift operations.
- Workers shall wear personal safety harnesses while in mechanical bucket aerial lifts.

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

- Eye protection (face shields, goggles, etc.) must be worn while: drilling, chipping, grinding, jack hammering, breaking bricks/concrete, welding, and any other operations which create a possible eye hazard, or as specific contracts require. (OCIP Contracts require 100% eye protection use.)
- Provide and ensure appropriate dust masks and respirators

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are worn for the job task.

- Hard hats shall be worn in all construction sites where there is a potential of falling objects from elevated locations. "Hard Hat Required" signs shall be posted in an area where anyone entering the site will see it clearly.
- Hearing protection shall be provided to and worn by all employees during (interior and exterior) mechanical operations including sawing, drilling, jack hammering, cutting, grinding, sanding, etc., work.

# H. Fall Protection

- Fall protection on campus shall, at minimum, meet OSHA requirements. For most trades, employers are required to provide their employees with fall protection when an employee works 6 feet or higher above a floor and there are unprotected sides or edges.
- Examples of work situations requiring fall protection include roofs, excavations, holes, hoist areas, ramps, walkways, and personnel lifts (boom-lifts & bucket trucks).
- When used for fall protection, harnesses shall be worn at all times and tied off to a secure anchor point.
- Work and fall protection methods shall be in accordance with OSHA regulations. The Project Manager and LSS reserve the right to stop work until appropriate OSHA regulatory compliance is met.

### I. Chemicals

- Containers of flammable/toxic materials shall be kept covered while not in use. Store flammable/combustible/toxic materials, solvents and chemicals in a safe manner in accordance with manufacturer recommendations and OSHA regulations.
- Upon request, Contractors shall provide the Project Manager and LSS with all Material Safety Data Sheets (MSDS) for each hazardous substance to be use prior to bringing such materials onto Bentley property.
- LSS reserves the right to reject the use of any material that may impact the health and safety of building occupants.
- Prior to performing work which generates vapors, fumes, dust, etc.; (epoxy, mastics, solvents, etc.) contractors must inform LSS and Trades departments to determine building occupant and HVAC impact so we can make adjustments to HVAC air intake or modify work schedules to avoid employees being exposed to chemicals.
- Any material spills or chemical entrainment into buildings shall be reported immediately to Campus Police. Contractors are required to arrange clean up of spills at their root and assume liability for damages. Immediate evacuation of the building may be required prior to fumes entering vents.

# J. Confined Spaces

• Confined spaces include: storage tanks, manholes, bins, sewers, vaults, boilers, etc.

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- Before entering, the contractor must perform OSHA required testing and follow all required procedures, including the use of a tripod, harness, permits, training, monitoring, communication and an attendant for each confined space entered.
- Permits (which may be obtained from LSS) for "Permit Required" confined spaces must be used and completed by the Contractor prior to confined space entry.
- Provide continuous monitoring with a calibrated 4-gas meter for oxygen, Hydrogen sulfide, Carbon monoxide and combustible lower explosive limit (LEL).
- Workers and supervisors shall be trained according to OSHA confined space regulations.

# K. Electrical Safety

- The Project Manager and LSS Manager shall be contacted a minimum of 48 hours prior to shutting down and locking out any electrical powered circuits, equipment and systems on Campus. All work shall be reviewed and approved by the Project Manager and LSS electrical department prior to the work.
- Metal parts of fixed, portable, or plug-connected equipment which do not carry a current shall be grounded.
- Extension cords shall be UL approved, be the three-wire type, and shall not be used if worn or frayed (including electrically taped).
- Temporary light fixtures shall be guarded to prevent contact.

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- Contractors are responsible to provide their own Lockout/Tagout equipment.
- GFCI protected circuits shall be utilized at all times and GFCI extension cords must be provided and used by the contractor.

## L. Lockout/ Tagout

- When servicing or maintaining machines & equipment, the contractor shall comply with all OSHA requirements under the Lockout/Tagout regulation. (1910.147)
- Prior to shutting down any systems, the contractor shall notify the Project Manager and LSS a minimum of 48 hours in advance.
- The contractor must notify all affected employees or departments that a Lockout/Tagout system is going to be utilized.
- All Contractors are responsible for providing their own Lockout/Tagout equipment as well as the appropriate PPE.

#### **M. Floor or Roof Openings**

- Floor/roof openings shall be guarded by barriers, railings, and/or a covering material.
- Barrier covers and signage depicting the hazard shall be provided by the contractor and bear letters no less than 1" high reading: "Do Not Remove."

• The contractor shall notify LSS and the Bentley University project manager prior to making any roof penetrations and insure penetration is sealed if left unattended for extended periods of time.

#### **N. Excavations and Trenches**

- The contractor shall comply with OSHA requirements dealing with excavation and shall notify the Facilities Management Department and/or LSS prior to commencing work. Trenching methods shall be submitted in writing for approval by the Project Manager and LSS a minimum of 48 hours prior to project initiation.
- Before excavation begins, the locations of underground pipes, cables, etc., must be determined by the contractor and action must be taken to prevent accidents. The Contractor shall coordinate and schedule Dig Safe services.
- Walls and space of excavations more the five (5) feet deep shall be guarded by shoring, sloping of the ground, or other means per OSHA guidelines.
- Trenches across roads shall be covered at all times with steel plates made for that purpose, except when workers are in the trenches.
- Asphalt installation shall be scheduled immediately upon completion of backfilling of the trench. When this is not possible, the contractor shall fill the trench with sand or fill material to bring it up to the top of asphalt, and shall monitor to ensure traffic does not result in removal of fill material.

• All contractor equipment shall be kept out of traffic lanes Bentley Contractor Safety 16 Revised on 5.18.15 Guide and walkways and trenching guards shall consist of wooden or metal barricades spaced side by side.

- Properly mark hazards with signage and caution tape and provide adequate fencing and stakes to restrict public access.
- A minimum of two battery lighted barricades shall be used at corners and where traffic approaches the trench at right angles. Where trenches parallel roads, distance between lights barricades shall not exceed 40 feet. The Project Manager and LSS must be notified if there is a need for a traffic director and Police Detail.
- Handrails shall consist of an intermediate and top rail on both sides of the bridge. The top rail shall be a minimum of 42" high and should be capable of withstanding lateral force of 200 lbs. against its center.

#### **O. Energy Management**

- When working within residence halls or campus buildings contractors must do the following before leaving the work area:
  - close all windows;
  - set air conditioning units to "low"; and
  - $\circ$  shut off all lights.

#### P. Sustainability

• Waste Management

- Contractors must be aware of recycling procedures on campus and are expected to recycle.
- All construction waste dumpsters should be taken to recovery/recycling facilities for recycling.

Suggested recycling/recovery facilities:

- Conigliaro Industries, Framingham 508-872-9668
- A. Graziano Inc., Braintree 781-843-7300
- Capital Paper Recycling, East Weymouth 800-337-3778
- Champion City Recovery, Stoughton 508-941-6700
- A detailed record of construction and demolition waste recycling (including waste type and tonnage) must be sent to Natalie Berland, Manager of Sustainability (<u>nberland@bentley.edu</u>, 781-891-2252).
- Bentley University has a single stream recycling program on campus. This means that all recyclable materials (except construction and demolition waste) can be put into the same recycling container. This includes all paper, cardboard, paper, plastic, glass bottles and cans.
- Contractors may use the dark-blue, dumpsters marked "Zero-sort Recycling" on campus to recycle paper, cardboard, paper, plastic, glass bottles and cans.

 Contractors must not use recycling bins found in Bentley Contractor Safety 18 Revised on 5.18.15 Guide buildings for any material. Recycling bins are considered "Bentley furniture" and are not to be used for contactor recycling or construction and demolition waste.

- If there is hazardous material to be recycled please contact Bentley's EHS Specialist: Christine Powers at cpowers@bentley.edu or (781-891-3448).
- No Idling Policy
  - All vehicles associated with contractors and subcontractors doing work on Bentley's campus must make efforts to reduce the amount of time spent idling in order to reduce harmful emissions. When arriving for loading or unloading of materials or passengers, vehicles should be turned off as soon as possible; vehicles should not be restarted until passengers are ready to depart and there is a clear path for exiting.
    - Exceptions to this rule are weather conditions, idling in traffic, and other circumstances that the driver feels would threaten passenger safety.
  - Delivery vehicles must turn off their vehicles while making their delivery to the facility.
  - Limit idling time during early-morning warm-up to what is recommended by the vehicle manufacturer (generally 3-5 minutes) in all but the coldest weather.
  - Valid exceptions to this policy that have not otherwise been stated must be made prior to being on campus and be put into writing along with the contract between Bentley University and the company involved.

# **Q. Additional Safety Instructions**

- Each contractor shall provide their employees with any additional required safety instructions as applicable to each employee's job prior to the start of the job, including, as a minimum, the OSHA requirements specific to the task to be done.
- The contractor and all sub-contractors must meet all applicable safety requirements in the performance of work on Bentley University property, whether or not such requirements are addressed in this pamphlet.
- LSS is available for consultation on these matters and other safety issues.
- Remember, safety is a vital part of Bentley University.
  - Think "safety" before you work;
  - Perform safely as you work; and
  - Leave your work area in a clean, safe condition.