Construction site shutdown planning guide

Risk Control services from Liberty Mutual Insurance

This guide can help you identify potential hazards during a construction site shutdown. As each situation is unique, the questions asked can help you focus on potential issues so you can develop a plan or improve an existing plan to help safeguard your workers, the public, and the overall project.

Seek the advice of your management and legal counsel when developing a shutdown plan.

Proactively developing a shutdown plan is one of the best ways to help control costs from workplace incidents, public injuries, and property damage. This guide poses questions most businesses need to answer when contemplating a construction site shutdown.

Workforce

• What activities and personnel will be needed to manage and maintain the project during the shutdown?
• What process will be in place for the project team to stay in communication?
• Will there be any lone worker situations and how will these workers maintain communication with management?

Public protection

• How will covered walkways and lighting be maintained?
• Are all project access points secured?
• Have you posted project contact information on site fencing in case of an emergency?
• Is exterior fencing secured and maintained? For example, are fence clips in place and secured?

• Are all fences, barriers, or other physical separation systems in good condition?

• Do fences, barriers, or separation systems pose trip hazards (i.e. fence bases projecting into sidewalks)? How can these conditions be improved?

• Will all loose tools, materials, and equipment on open floors and roofs be removed or secured to prevent high winds from blowing them off?

• Are all floor openings secured with barricades or covers?

• Will sidewalks, streets, and other abutting areas used by the public be maintained in a safe condition, and how will these spaces be monitored?

• Will traffic patterns be impacted? When can traffic be returned to normal? Are signs, channeling devices, and other systems for controlling and directing traffic in place and how will they be managed to ensure they remain viable?

• Is there an “attractive nuisance” potential on the project (i.e. tower and mobile cranes, swimming pools, heavy equipment)?

• Can attractive nuisances be removed, hidden, or managed to reduce exposure?

• Will egress from adjacent properties be impacted (fencing, excavations, equipment) and can it be managed to eliminate or minimize any correlating risk?

**Temporary structures**

• Are ladders on site that should be removed?

• Are exterior scaffolds on the building? Can they be safely removed?

• Do scaffolds hold materials that should be removed?

• If scaffolding and shoring must remain in place, can it be secured to reduce the chance of structural failure?

• Can tarps or other non-essential components that increase wind uplift forces on a structure be removed?

• Can formwork be safely removed?

• Who has responsibility to inspect scaffolding and shoring?

• What is the inspection method and how often will it be documented?
Structural integrity

• What are the implications of underground structures being left unfinished or uncovered for an extended period of time?

• Has the engineer of record reviewed the structure and documented concerns and recommendations?

• How will the structure be made safe?

• Can any installed temporary support systems be removed? If not, how will they be maintained or inspected?

• Should additional temporary support systems be installed during the shutdown phase?

• Can all structural components be secured as close to their final configurations as possible? Examples might include fully bolting steel connections and securing decking (more than tack welding) or fully flashing windows.

Excavations supports

• Will open trenches or excavations pose a cave-in hazard? How can trenches or excavations be covered, backfilled, or otherwise protected?

• If steel plates are used to cover trenches, are they pinned and/or secured? Will they require periodic maintenance?

• Are required barricades in place? Will they require maintenance?

Property protection

• Does the project location require manned security? If so, consider the frequency of security walks, how security will maintain documentation of inspections/visitors, and how overall security of the site will be managed.

• Are camera systems in place or feasible to install?

• Do signs warn that camera systems are in place?

• Are signs and postings prominently displayed at all potential entry points to warn of hazards and inform of NO TRESPASSING?

• Do signs need to be periodically inspected or maintained?

• Does any specialty equipment or material need additional storage attention/securement?

• If emergency generators are on site for the project or to support abutting structures, are they in good condition and operate properly?
• Do individuals responsible for the equipment know how often and under what conditions they will be required to inspect and test the equipment?

• Will the site require any maintenance, such as snow removal?

• Have snow removal services been identified for spaces open to the public but controlled by the project?

• Is the building envelope water tight? Does it need to be?

• Is there a need for additional protection, temporary drains, water diversions, etc., for structures that are not water tight?

• Is there a contingency plan to deal with severe weather, such as hail, wind, flood?

• Are all required temporary and permanent egress areas maintained for building operations?

• How are job trailers, offices, and shared spaces being cleaned/sanitized in preparation for shutdown?

• Do de-watering systems need to be operating?

**Fire prevention**

• Will fire prevention systems remain in service?

• How are flammable liquids being stored?

• Are hoists/elevators accessible to police/fire departments at the main level and in a state of readiness?

• If emergency services need to access a secured site, has the method of access been identified?

• Has the project team communicated with local fire department on combustibles and flammables storage, floor openings, live electrical systems, and the status of fire protection/prevention systems?

• Can all ignitable liquids and compressed gas cylinders be removed from the site? If not, can they be secured and protected from weather?

• Is the fire protection stand pipe in a state of readiness and the local fire department knows its location, access, termination level, etc.?

• Can all non-essential combustible material be removed from the site?
Mold prevention
• Can moisture sensitive materials be removed from the site or be protected?
• Can plumbing components be drained and shut down to prevent leaks?
• Will existing HVAC systems need maintenance?
• If water systems cannot be drained, is there an alarm that sounds if a leak were to occur?

Major equipment
• Can major equipment be moved off site?
• Is the tower crane base secured, fenced-off, and locked?
• Is the tower crane set to weather-vane?
• If the crane will remain in place, has the tower been secured to prevent climbing by the public?
• Are security provisions in place on tower crane access points to warn of trespassers?
• Can cranes be secured per manufacturer recommendations?
• Are crane securement methods applicable for weather events such as hurricane and high winds?
• Are qualified individuals identified and available to inspect the crane as needed during the shutdown?
• Have you followed the manufacturer’s recommendations for securing equipment?
• Is all heavy equipment parked with cabs locked and keys removed?
• Is other equipment stored or positioned in its lowest energy state (zero potential energy), where applicable?

Project records
• Have you video documented the site’s condition at shutdown?
• Have you inventoried all material and equipment?
• Have you updated the project schedule?
• Have appropriate parties been notified of the delay?
• What contractual documents need to be reviewed?
Are all project records, including insurance related documents and shutdown documentation, kept in a secured and accessible location for a minimum of the applicable statute of repose.

If the delay progresses, do any inspections need to be performed, how will documents be stored, and how will any issues be corrected?

**Communications**

Who are the key stakeholders that need to be aware of the site shutdown?

How will you communicate with key stakeholders on the timing and details of shutdown (subcontractors, delivery services, local authorities, legal, etc.)?

Have you sought legal counsel guidance and consultation on the shutdown with regard to contractors, regulatory guidance, labor communications, and relations?