

Construction Site Shutdown

This document will serve as a guideline in the event we are directed by a client, an executive, or a governmental authority to cease or suspend all construction activities on our projects. The following listed below shall serve as a general guideline for a project shutdown or stall. Check with the local jurisdiction for local requirements.

GENERAL

- Plan periodic off-site meetings and / or telephone conferences with clients, design team, contractors, unions, etc. for status and any new measures.
- Maintain separate cost identifications, PI's, etc. for shut down effects and maintenance.
- Continuance of accounting, requisitions, payments, etc. shall managed off site.
- Ensure all emergency, temporary, and permanent egress is maintained and unobstructed prior to site closure, including ladders, scaffold stairs, graded ramps.
- Ensure all essential utilities to the site maintenance are maintained and clearly marked up to the point of closure. Coordinate any shutdowns with the applicable authority and/or subcontractor.
- All required temporary or permanent egress shall be maintained unobstructed
- All essential utilities to the site maintenance shall be maintained.
- Ensure public sidewalks are maintained safely in accordance with DOT and local governmental authorities, free of ice, snow, grease, debris, tripping hazards, etc.
- All traffic control protection shall remain in a state of readiness.
- Temporary lighting shall remain illuminated.
- Temporary plumbing system shall be shut down and drained to prevent freezing.
- As applicable, the construction site must be enclosed with a construction fence in accordance to the local regulatory agency and or department.

- Require a watchman, 24/7 video surveillance, and/or other types of electronic security measures as deemed appropriate by regional management and if permitted by local authorities.
- A rodent control plan shall be implemented as applicable to the location.

EXCAVATION FOUNDATION

- Un-shored earth cuts shall be sloped or benched to an effective stable angle of repose of 45 degrees or flatter and stabilized to prevent erosion. Angles steeper than 45 degrees or adjacent to existing buildings or public ways will not be permitted without a geotechnical report by licensed professional engineer verifying stability of soil at proposed angle.
- Soil shall be sloped away from adjoining structures, lots, and public sidewalk, for proper drainage.
- Support of excavation shoring shall be inspected by a licensed engineer for conformance to and completeness in accordance with design. All elements of installed support of excavation shall be completed such as tiebacks, rakers, footing blocks, walers. If work cannot be completed in areas of installed excavation supports, a licensed engineer shall provide a signed and sealed report verifying current stability of excavation and inspect prior to project closure. Lagging boards shall be inspected against soil loss. Support of excavation shoring shall be left in a stable position.
- Underpinning shall be inspected by a licensed engineer for conformance to and completeness in accordance with the approved design. All excavated underpinning piers shall be concreted, and load transferred to the pier. Unless underpinning is braced by rakers or tie backs, fill shall be placed against all exposed underpinning, to prevent lateral displacement. Licensed engineer shall provide a signed and sealed report verifying current stability of underpinning and of structure that was underpinned and shall inspect prior to shutdown to ensure sustained stability. Underpinning shall be left in a stable position.

- Excavations/Foundations shall be maintained dry up to the point of closure. Where pumping operations were employed, a Licensed Engineer shall evaluate foundation uplift and waterproofing prior to authorizing cessation of pumping operations. *Note: Department of Environmental Protection (DEP) permits are required for pumping into certain city waste water removal systems and Department of Environmental Conservation (DEC) permits are required for pumping into natural water bodies. Check with your local authorities.*
- All heavy construction equipment and storage (trailers, shipping containers, excavators, backhoes, etc.) shall be locked, secured and either removed from the site or relocated back from edge of excavation a distance equal to 1 1/2 depth of excavation, unless engineer of record certifies that SOE shoring is designed for the surcharge load from equipment.
- The construction excavation/foundation site must be enclosed with a construction fence or other means of protection in accordance to the local regulatory agency and or department.

CRANES/HOIST

- Secure all cranes (Tower, crawler, hydraulic, etc.) in accordance to the manufacturer's recommendations at the end of each work day. Where possible all booms should be lowered.
- Hoists and Elevators to remain in emergency readiness for local fire and police department.
- Secure all hoist and/or other lifting machinery.

SUPER STRUCTURE

- All formwork and re-shores shall be removed, provided concrete has reached its design strength. If re-shores are to remain, they shall be periodically checked as possible during project inspections to make certain they are snug. Perimeter re-shores shall be tied back as per local regulatory agencies and/or department.

CORONAVIRUS DISEASE 2019 WORKPLACE STALLED SITE PLAN

- All steel members secured by a minimum of 2 bolts per connections or greater as determined by the steel erection engineer.
- Ensure all metal decking is secured.
- All material such as bolts, shear studs, welding material, gas tanks, and other consumable secure away from exterior and interior building edges.
- Ensure all working decks are cleaned at the end of every work day.
- All equipment such as compressors, generators, crabs, lifts secured away from exterior and interior building edges.
- The fire standpipe must remain in a state of readiness.
- All scaffolding and debris netting, sidewalk sheds, and temporary walkways shall be inspected for compliance, including required illumination. Loose scaffold planking shall be removed or properly fastened prior to closure. Scaffold tiebacks shall be maintained and inspected for signs failure prior to closure.
- All adjoining property protection shall be maintained/reviewed prior to closure.
- All guardrails systems, vertical netting, horizontal netting floor, wall, and roof openings protection shall be in place and secure.
- All construction debris must be removed from the project All volatile liquids or gases (oxygen, acetylene, gasoline, etc.) shall be removed from site, except those used to fuel required emergency power generation equipment. Storage shall be in accordance with the applicable local, state, and federal, fire code, rules and regulations.
- All construction materials shall be safely stored. All light-weight materials susceptible to becoming wind-borne shall be removed from site, tied down, or ballasted.
- All required temporary or permanent egress shall be confirmed clear and unobstructed.
- All required temporary or permanent exit signs and exit illumination sign shall be operating/maintained prior to closure.
- Ensure all bolts, nuts, connections, etc. on any steel erection are tight and secure.

CONTROL

Housekeeping

Upon completion of the above noted, a general housekeeping operation will be performed for the entire project. This is to include all project offices, sub-contractor's trailers and shanties. Special focus will be placed on cleaning and disinfecting surfaces which come in direct human contact. Debris from these areas will be removed. Targeted areas/items are but not limited to:

- *Site entrance access gates and doors*
- *Turnstiles entrance*
- *Tools*
- *Hoist Cars*
- *Office/shanties furniture, key boards, phones, printer, etc.*
- *Heavy equipment*
- *Fire extinguishers*
- *Medical cabinets*
- *Phone*
- *Copy machine*
- *Water cooler*
- *Coffee maker*
- *Toilets*
- *White board*
- *Installing high-efficiency air filters*

All workers performing housekeeping must wear the appropriate personal protective equipment (gloves, respiratory protection, etc.) Outside environmental services can be utilized to perform general housekeeping and/or sanitize project field and remote offices. Safety Data Sheets should remain on site for all cleaning products. All locations shall be cleaned prior to closure.

Project Review

The lead Superintendent and designated SH&E professional shall walk through the project and ensure all the aforementioned items have been completed. Other site-specific items may need to be accomplished in addition to those mentioned.

The Project Executive shall keep the Regional Office apprised of the project closure status, daily.

Secure all project files and the project office. Remove those that are deemed necessary.