# General

**RoD SPEC NOTE:** Use this Section to specify requirements for temporary protection of the public and existing building occupants during construction, by means of barriers and enclosures that are not incorporated into the final or permanent work.

## Summary

* + 1. Provide temporary barriers and enclosures necessary to protect the public and building occupants and to secure Place of the Work during performance of the Work.
		2. Adequately protect the Work at all stages of operations and maintain protection until the Work is completed. Remove and replace, at no additional cost to Owner, damaged Work and materials that cannot be repaired or restored to the approval of the Consultant.
		3. Comply with applicable regulatory requirements.

## Barriers and enclosures - general

* + 1. Maintain temporary barriers and enclosures in good condition for the duration of the Work.
		2. In addition to requirements of authorities having jurisdiction, provide temporary protection and safeguards adequate to protect against:
			1. Accident or injury to workers and other persons on the site or adjacent Work and properties.
			2. Damage to any part of the Work and to any adjoining or adjacent structure, property, services, and other similar items, by overloading, weather, frost, any other cause resulting from the execution of the Work.
			3. Protect Work, existing property, adjacent tenant and public property from damage during performance of Work. Should any part of the Work or any buildings, services or similar items on or surrounding the areas of the Work and adjacent to any road leading thereto become damaged or disfigured due to lack or failure of such protection, they shall be made good with material identical with the existing and adjoining surfaces, to the satisfaction of the authorities having jurisdiction and the Owner.
			4. Damaged Work shall be made good by those performing Work originally, or workers experienced or skilled in that particular type of Work, at expense of those causing damage.
			5. Provide and maintain necessary temporary enclosures, hoardings, fences, gates, barriers, guards, hoists, cranes, stairs, ladders and scaffolding, walks, platforms, staging as necessary for the Work and protection of workers, public and others from injury, and for public access to adjacent buildings. All such apparatus shall meet requirements of the authorities having jurisdiction.
			6. Provide secure, rigid guard railings, hoardings and barricades around openings, as required by authorities having jurisdiction and to maintain safety.
			7. Provide proper guard devices, signs, signals and lights for the prevention of accidents.
			8. Maintain at night, sufficient and suitable warning lights to prevent accidents and injuries to persons and/or property.
			9. Alter, remove and relocate or replace hoardings, barriers and entrances as required by the Work. Hazards requiring such protection shall be eliminated as soon as possible and protection devices removed. Maintain protection until state of construction allows their removal.
			10. Provide and maintain temporary weathertight protection for all exterior openings in walls, floors and roofs until the building is closed in.
			11. Close off floor areas where walls are not finished, seal off openings and enclose building interior Work area. Polyethylene or other approved translucent material shall be framed in or around wall openings. Provide temporary doors, frames, hinges, locks, keys and bolts as required.
			12. Should the Work be stopped for any cause, provide protection and bracing for the Work.
		3. Lay protective 13mm (1/2") plywood over completed areas of roof on which other trades are to Work.
		4. Remove temporary barriers and enclosures from Place of the Work when no longer required.

## Design and safety requirements for temporary Work

* + 1. Be responsible for design, erection, operation, maintenance and removal of temporary structural and other temporary facilities, barriers, and enclosures.
		2. Engage and pay for registered professional engineering personnel skilled in the appropriate disciplines to perform these functions where required by law or by the Contract Documents; and in cases where such temporary facilities and their method of construction are of such a nature that professional engineering skill is required to produce safe and satisfactory results.
		3. Engage and pay for Professional Engineer(s) registered in Place of the Work to design and supervise construction and maintenance of hoardings, covered ways, protective canopies and project sign(s). Designs provided by Consultant or Owner for such Work cover general appearance only.

## Protection of open trenches and excavations

* + 1. In addition to the provisions of Ontario Regulation 213/91 made under the Occupational Health and Safety Act, R.S.O. 1990, employ the following protection measures for trenches and excavations left open at the end of the Workday or where, during any Workday, a trench or excavation is left unattended by the Contractor:
			1. Where the public has access to the perimeter of an excavation, install a barrier at least 1.1 m high around the complete perimeter of the excavation.
			2. Vertical supports must be secure, have a spacing of not more than 1.1 m and be a minimum distance of 300 mm from the top of the wall of the excavation.
			3. The barrier shall include a fencing fabric, with openings not exceeding 100 mm, securely attached to the vertical supports at the top, center and bottom and spacing not exceeding 100 mm.
			4. If the excavation is greater than 0.3 m in depth, install toe board with the fencing fabric securely fastened to it to prevent persons from slipping under the fabric and into the excavation.
			5. If an excavation is adjacent to a sidewalk or an area commonly used by the public as a walkway or recreation area, the fencing fabric shall be a metal mesh.
		2. Where an excavation is greater than 1.0 m in depth, and the public has access to the perimeter, signs shall be posted indicating “Danger Due to Excavation”.
		3. Ensure barriers are in good condition and stable prior to vacating the project at the end of each Workday.

## Exterior hoarding / fencing

* + 1. Erect temporary exterior site hoarding to comply with applicable regulatory requirements.

SPEC NOTE: Use the following plywood hoarding where medium security is required for public safety.

* + 1. Medium-security temporary plywood hoarding enclosure:
			1. Erect framing members and install hoarding panels at the perimeter of the Place of the Work as indicated or required by authorities having jurisdiction to fully enclose the Place of the Work and as follows, unless otherwise indicated or required by authorities having jurisdiction:
			2. Height of hoarding: 2440mm (8') minimum, unless otherwise indicated, above grade at any point.
			3. Vertical posts spaced 2440mm (8’) on centre, maximum.
			4. Vertical posts: Set a minimum of 1220mm (4’) in the ground.
			5. Horizontal rails securely nailed or screwed to vertical posts at top, bottom, and intermediate locations at 610mm (24") on centre.
			6. Erect panels around objects as required.
			7. Hoarding shall contain no opening more than 100mm (4") wide or less than 914mm (3') above the bottom of the fence except where required for access to and from the Place of the Work.
			8. Provide no rails, other horizontal or diagonal bracing, attachments, or pattern of openings on the outside that would facilitate climbing.
			9. At access openings: Provide gates that provide performance and safety at least equivalent to hoarding and contain wire mesh of sufficient openness to provide visibility for traffic entering or exiting the Place of the Work.
			10. Provide overhead protection hoarding where public access is required.
				1. Erect and maintain pedestrian walkways including roof and side covers, complete with signs and electrical lighting as required by law.
			11. Paint public side of site enclosure in selected colours with one (1) coat of exterior alkyd primer and one (1) coat of exterior alkyd paint. Maintain public side of enclosure in clean condition. Paint project side of particleboard panels with one (1) coat of exterior alkyd primer.

SPEC NOTE: Use the following chain link hoarding where low security, quick site enclosures are required. Minimal site access or away from site traffic.

* + 1. Low-security temporary chain link hoarding enclosure:
			1. Fence fabric: 3.75mm diameter (No. 9 gauge) steel wire woven in a 50mm (2") mesh, hot dipped galvanized after weaving and knuckled finish top and bottom selvage edges.
			2. Galvanized fabric to have a minimum zinc application of 490 g/m² of surface area.
			3. Posts: CLFMI (Chain Link Fence Manufacturer Institute) Type 1, standard buttwelded Schedule 40, ASTM F1083-10 standard weight, galvanized pipe.
			4. Provide prefabricated panelized chain link and post galvanized metal hoarding system.
		2. Signage: Provide suitable sized notice signs at entrance to the Place of the Work with contrasting text "RESTRICTED ACCESS - CONSTRUCTION SITE" complete with the name of Contractor.
		3. Provide lockable access gates for Construction Equipment and lockable pedestrian doors as required to facilitate construction access.
		4. Erect and maintain pedestrian walkways including roof and side covers, complete with pedestrian signage and electrical lighting.

## Weather enclosures

* + 1. Provide weather tight enclosures to unfinished door and window openings, tops of shafts and other openings in floors and roofs.
		2. Provide weather enclosures to protect floor areas where walls are not finished and to enclose Work areas that require temporary heating.
		3. Design weather enclosures to withstand wind pressure and snow loading requirements.

## Dust tight screens and/or partitions

* + 1. Provide dust tight screens or barriers to localize dust generating activities for the protection of tenants, employees, equipment, adjacent and finished areas of Work, and the public. Maintain and relocate protection until Work is complete. Respond immediately to complaints of dust received from the public, authorities having jurisdiction, Owner and Consultant.
		2. Obtain Consultant's approval of installed dustproof screens and protection methods before proceeding with construction/alteration Work.
		3. Painted gypsum wallboard and metal stud dustproof screens, shall extend to underside of structure, and shall be erected to protect adjoining areas and rooms. Apply bead of sealant or other acceptable seal continuously around periphery of each face of partitioning to seal gypsum board/structure junction where dustproof screens abut fixed building components. Seal perimeter of cutouts, around fixtures and fittings and other penetrations. Tape or seal between adjacent boards. Separate construction areas from occupied areas.
		4. Provide protection for existing equipment sensitive to dust and noise. Prevent dust migration through HVAC or return air systems.
		5. Co-ordinate location of dust barriers and dust tight doors with Consultant.
		6. Install temporary packing at bottom of doors to areas where demolition/construction shall be performed to prevent dust seepage into existing spaces. Do not permit dust and dirt to escape beyond area being constructed/altered.
		7. Provide daily vacuuming of construction dust from existing areas as Work progresses; this shall be considered a minimum requirement, increase vacuuming as necessary. The Owner may have vacuuming Work done by others and cost deducted from Contractor's progress payments if this requirement is not fulfilled.
		8. Provide locked doors in barriers to permit access by Consultant, Owner and Owner's security personnel to construction areas and to areas under Contractor's custody. Supply padlocks and construction cores.
		9. Remove dustproof screens at completion of Work in areas and make good damaged or blemished areas. Patch and make good to access, altered and damaged areas caused by Work and screens. Maintain integrity of fire or sound separation.
		10. Prevent nuisance to adjacent areas near the Work from dust by taking additional appropriate anti-dust measures at such times as found necessary, and at other times complaints of dust are received from the Owner's representative and others.

## Fire routes

* + 1. Maintain fire access routes, including overhead clearances, for use by emergency response vehicles.

## Protection of building finishes

* + 1. Provide necessary temporary barriers and enclosures to protect [existing and] completed or partially completed finished surfaces from damage during performance of the Work.

# Products – not used

# Execution – not used

End of section