# General

**RoD SPEC NOTE:** Use this Section to specify temporary utilities necessary to complete the Work but not incorporated into final or permanent Work.

## Summary

* + 1. Provide temporary utilities as specified and as otherwise necessary to perform the Work expeditiously.
		2. Arrange with the Owner for use of existing services. Prior approval from the Owner is required.

## Temporary utilities - general

* + 1. Be responsible for all fees, permits and charges, including arrangements for all necessary applications, incurred throughout the construction period until the date of Substantial Performance.
		2. Provide power generators as required to maintain construction activities and all temporary facilities, if temporary electrical power supply is delayed or unavailable from the local authority at no extra cost to the Owner.
		3. Operate equipment according to the requirements of the Ontario Ministry of Labour under the Occupational Health and Safety Act and Regulations for Construction Projects.
		4. Remove temporary utilities after use.

## Temporary water supply

* + 1. Arrange and pay for a temporary supply of potable quality water required during construction.
		2. When available and with written consent of the Owner, Contractor may connect to and use Owner’s existing water supply for temporary use during construction, subject to existing available volume and pressure. Usage at no cost to Contractor.
		3. The Owner will pay for the cost of the water supply for the existing service only. Where existing service is not sufficient, provide for additional service at Contractor’s expense.
		4. Extend supply pipe or pipes from nearest available sources and maintain in good condition until no longer required.
		5. Provide proper shut off valve and backflow preventer on all temporary connections between each existing and temporary service.
		6. Arrange and pay for necessary water supply connections and disconnections.
		7. Use of hydrants or fire hoses is not permitted without written consent from the Owner.

## Temporary heating and ventilation

* + 1. Arrange and pay for temporary heating and ventilation required during construction.
		2. When available and with written consent of the Owner, Contractor may connect to and use Owner’s existing supply of natural gas or propane (whichever is available for primary fuel for heating) for temporary use during construction, subject to existing available volume and pressure. Usage at no cost to Contractor.
		3. Vent construction heaters in enclosed spaces to the outside or use flameless type of construction heaters.
		4. Furnish other temporary heating as required by various technical trade Sections or by Product manufacturers. Replace with new, any work damaged due to failure to provide adequate heat at no cost to Owner.
		5. Be responsible for operation and maintenance of permanent heating and ventilation system, for replacing and repairing damage it may suffer, and shall assume operation and maintenance of the system in all its parts and payment for fuel consumed.
		6. Operation and maintenance shall include inspection at least every two weeks of thermostats, valves, switches, lubrication, fan, belt and motor adjustment, cleaning and/or replacement of filters, and replacement of filters and re-servicing of system at completion of work.
		7. Connect electric motors only to permanent source of power, or otherwise provide proper source with correct design characteristics and with no fluctuation in voltage.
		8. Operate systems in a non-wasteful and energy efficient manner. Be responsible for any system damage. Commence warranty period after re-servicing and from time the Owner takes over the premises.

**RoD SPEC NOTE:** The following paragraphs indicate Ready-for-Takeover milestone. Use Ready-for-Takeover on CCDC 2-2020 Projects.

**RoD SPEC NOTE:** Revise “Ready-for-Takeover” to “Substantial Performance of the Work” when using a different Contract Delivery Method on the Project.

* + 1. Just prior to Ready-for-Takeover, replace filters, clean HVAC ducting, and perform other required maintenance to ensure systems are in as near as new condition as possible.
		2. Ensure that systems manufacturers’ warranties do not commence until the date of Ready-for-Takeover or, if manufacturers’ warranties do commence earlier when systems are put into use, arrange for necessary extension of manufacturers’ warranties or provide equivalent coverage under Contractor’s warranty
		3. Provide temporary heat for the Work as required to:
			1. Facilitate progress of Work;
			2. Protect the Work against dampness and cold;
			3. Prevent moisture condensation on surfaces, freezing, or other damage to finishes or stored Products;
			4. Maintain specified minimum ambient temperatures and humidity levels for storage, installation and curing of Products;
			5. After building is enclosed, maintain interior temperature of minimum 10 degrees C in isolated areas to 20 degrees C as required by technical trade Sections or by Product manufacturers.
		4. Provide temporary ventilation for the Work as required to:
			1. Prevent accumulations of fumes, exhaust, vapours, gases and other hazardous, noxious, or volatile substances in enclosed spaces, as required to maintain a safe work environment meeting applicable regulatory requirements;
			2. Ensure that hazardous, noxious, or volatile substances do not migrate to Owner occupied spaces;
			3. Dispose of exhaust materials in manner that will not result in harmful exposure to persons;
			4. Ventilate temporary sanitary facilities;
			5. Ventilate storage spaces containing hazardous or volatile materials;
			6. Continue operation of ventilation and exhaust system for time after cessation of work process to assure removal of harmful contaminants.

## Temporary electrical power and lighting

* + 1. Arrange and pay for temporary power and lighting required during construction.
		2. When available and with written consent of the Owner, Contractor may connect to and use Owner’s existing electrical supply for temporary use during construction. Usage at no cost to Contractor.
		3. Operate systems in a non-wasteful and energy efficient manner. Be responsible for any system damage.

**RoD SPEC NOTE:** The following paragraphs indicate Ready-for-Takeover milestone. Use Ready-for-Takeover on CCDC 2-2020 Projects.

**RoD SPEC NOTE:** Revise “Ready-for-Takeover” to “Substantial Performance of the Work” when using a different Contract Delivery Method on the Project.

* + 1. Just prior to Ready-for-Takeover, replace lamps which have been used for more than three (3) months.
		2. Ensure that systems manufacturers’ warranties do not commence until the date of Ready-for-Takeover, or, if manufacturers’ warranties do commence earlier when systems are put into use, arrange for necessary extension of manufacturers’ warranties or provide equivalent coverage under Contractor’s warranty.
		3. Provide and maintain an adequate temporary electrical service for performance of the Work including, but not limited to, operation of electric pumps, motors, vibrators and other power tools, hoisting and related construction and general illumination during the Work.
		4. Provide power at temporary storage sheds and field office when required.
		5. Make connections available to any part of the work within distance of a 3048mm (10') extension. Each Subcontractor shall be responsible for their own extension cords.
		6. Provide and maintain any components and equipment necessary to transform supply power to necessary temporary power voltage.
		7. Contractor will be permitted use of existing power for construction purposes at no cost to the Contractor. Provide additional temporary power for individual tasks required by the technical trade Sections.
		8. Arrange and pay for necessary connections and disconnections of temporary power and lighting in accordance with regulatory requirements.
		9. Install temporary lighting for the following:
			1. Emergency evacuation, safety and security throughout the Project at intensity levels required by authorities having jurisdiction;
			2. Performance of work throughout work areas as required, evenly distributed, and at intensities to ensure proper installations and applications are achieved;
			3. Performance of finishing work in areas as required, evenly distributed, and of an intensity of at least 30 foot candles.

## Temporary sanitary facilities

* + 1. Provide sanitary facilities for persons on the work site as approved by the Authorities having Jurisdiction. Install them in sufficient number and maintain them in a sanitary condition.
		2. Provide and maintain drinking water and washing facilities in accordance with governing regulations and ordinances.
		3. Do not permit construction personnel to use washroom and toilet facilities on premises which have been installed as part of the new work or which are part of the existing building for use by non-construction personnel.
		4. Post notices and take such precautions as required by local health authorities.
		5. When permanent water and drain connections are completed, provide temporary water closets and urinals complete with temporary enclosures, inside building.
		6. Except where connected to municipal sewer system, periodically remove wastes from Site.

## Existing building heating, ventilation, power, and lighting

* + 1. Existing building heating, ventilation, power, and lighting may be relied upon and used during construction except during hours or days when the building is not operational.
		2. Coordinate and make arrangements with the building operator and pay any costs required for provision of these services during hours or days when the building is not operational.

# Products – not used

# Execution – not used

End of section