

**SECTION 31 23 19
DEWATERING**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Dewatering system.
- B. Observation wells.

1.02 RELATED SECTIONS

- A. Section 31 13 16 - Selective Tree and Shrub Trimming.
- B. Section 31 20 00 - Earth Moving.

1.03 SUBMITTALS

- A. Submit under provisions of Section 01 30 00 - Administrative Requirements.
- B. Shop Drawings: Submit shop drawings indicating layout of dewatering system, details of construction, connections, and relationship with adjacent construction.

1.04 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum 2 year experience installing similar products.

1.05 PRE-INSTALLATION MEETINGS

- A. Convene minimum two weeks prior to starting work of this section.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store products in manufacturer's unopened packaging bearing the brand name and manufacturer's identification until ready for installation.

1.07 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

1.08 SEQUENCING

- A. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Acceptable Manufacturers: _____.
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

2.02 MATERIALS

- A. Dewatering:
 - 1. Provide a system to lower and control groundwater in order to permit construction activities. Install sufficient dewatering equipment to drain water-bearing strata above and below bottom of foundations, drains, and other excavations.
 - 2. Operate dewatering system continuously until dewatering is no longer required. Dispose of water removed from excavations in a manner to avoid endangering public health, property, and portions of work under construction or completed. Provide flow control devices as required by governing authorities.
- B. Observation Wells:
 - 1. Provide, take measurements, and maintain observation wells indicated and additional observation wells as may be required by governing authorities.

2. Remove observation wells when dewatering is completed.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.02 INSTALLATION

- A. Install in accordance with manufacturer's instructions and in proper relationship with adjacent construction. Test for proper operation and adjust until satisfactory results are obtained. Install system to provide the following:
 1. Lowering and controlling groundwater levels during excavation and construction.
 2. Control of hydrostatic pressures during excavation and construction.
 3. Control of surface and subsurface water, ice, and snow related to dewatering.
 4. Standby equipment for system back-up.
 5. Establishment and monitoring of observation wells.
 6. Legal disposal of water removed from excavations.
 7. Removal of observation wells when no longer required.

END OF SECTION 31 23 19