**SECTION 31 23 19**

# Dewatering

**BASED ON DFD MASTER SPECIFICATION DATED 09/01/2015**

This section has been written to cover most (but not all) situations that you will encounter. Depending on the requirements of your specific project, you may have to add material, delete items, or modify what is currently written. The Division of Facilities Development expects changes and comments from you.

**PART 1 - GENERAL**

**SCOPE**

The work under this section shall consist of providing all work, materials, labor, equipment, and supervision necessary to provide for dewatering as required in these specifications, on the drawings and as otherwise deemed necessary to complete the work. All dewatering required for construction shall be included in the Contractor’s Bid. Included are the following topics:

PART 1 - General

Scope

Related Work

References

Submittals

Permits/Fees

Environmental Contaminants

Noise Pollution

PART 2 - Materials

General

PART 3 - Execution

General

Sump Dewatering

Well Installation

Operation

Removal/Abandonment

**RELATED WORK**

Applicable provisions of Division 1 govern work under this Section.

##### Include any additional related work sections as necessary

Section 02 05 00 – Common Work Results for Existing Conditions

Section 02 32 00 – Geo Technical Investigation

Section 30 05 00 – Common Work Results for All Exterior Work

Section 31 20 00 -- Earthmoving

Section 31 25 00 – Erosion Control

00 00 00 – (Section Title)

## REFERENCES

Chapter NR 141 – Groundwater Monitoring Well Requirements

Chapter NR 812 – Well Construction and Pump Installation

### SUBMITTALS

When deep wells or well point systems are utilized, provide system design computations.

When permits are required for dewatering, provide copies of all permits.

Provide copies of the layout of all dewatering system components.

Provide copies of all well abandonment forms.

**PERMITS/FEES**

Pay for and obtain all permits/approval required by local, state and federal regulations.

Necessary permits/approval may include, but are not limited to WDNR high capacity well approval and erosion control permits.

***(Note to the designer: Revise the following paragraph as necessary based on the availability of hydrants as a water source.)***

When installing by jetting methods, the Contractor shall provide their own water source. Do not use hydrants as water source without permission from DFD Project Representative and/or local utility, as applicable. If permission to use hydrants has been allowed, the Contractor shall obtain and pay for any required hydrant use permits.

**ENVIRONMENTAL CONTAMINANTS**

Monitor dewatering system discharge regularly for signs of chemicals or other environmental contaminants.

If chemicals or environmental contaminants are observed, terminate dewatering system operation immediately and contact the DFD Project Representative.

Prevent dewatering system from introducing contaminants into the soil or groundwater.

**NOISE POLLUTION**

Provide mufflers, housing, berms and fencing as necessary to minimize noise pollution resulting from dewatering system operation.

**PART 2 - MATERIALS**

**GENERAL**

All deepwell and wellpoint dewatering equipment and well construction/abandonment materials shall meet the requirements of NR 812.

**PART 3- EXECUTION**

**GENERAL**

Comply with all local, state and federal regulations.

When deep wells or well point systems are utilized, prepare a system design. Design system to dewater site as necessary to complete construction, but minimize impact on local water table. Do not adversely impact neighboring private wells.

Coordinate installation of dewatering system with other contractors. Locate dewatering system components in locations that do not interfere with site operations or other construction activities.

Monitor water levels in wells adjacent to construction site. Adjust dewatering system configuration and operation as necessary if neighboring wells are adversely impacted.

Pump groundwater at lowest rate necessary to dewater site as required to accommodate other sitework.

**SUMP DEWATERING**

Install collection sump in the low point of the excavation(s).

Provide filter material, trash screens and other devices around pump or intake to avoid pumping of sediment.

**WELL INSTALLATION**

Install wells by rotary, driven or hydraulic jetting methods.

**OPERATION**

Provide personnel, equipment and power necessary to maintain and operate the dewatering system as required to complete construction at the site.

Do not discharge water into the sanitary sewer system.

**REMOVAL/ABANDONMENT**

Remove all dewatering system components immediately following use.

Abandon dewatering wells in accordance with NR 812.

Clean receiving storm sewer system, ground surface and surface waters of any sediment or debris deposits resulting from dewatering system operation.

**END OF SECTION**