

## Removal and Control of Water

### 1. SCOPE

The work shall consist of the removal of surface water and groundwater as needed to perform the required construction in accordance with the drawings, specifications and special provisions. It shall include: (1) building and maintaining all necessary temporary impounding works, channels, irrigation water bypasses, and diversions, (2) furnishing, installing and operating all necessary pumps, piping and other facilities and equipment, and (3) removing all such temporary works and equipment after they have served their purposes.

### 2. DIVERTING SURFACE WATER

The Contractor shall build, maintain and operate all cofferdams, channels, flumes, sumps, and other temporary diversion and protective works needed to divert stream flow and other surface water through, around, and away from the construction site while construction is in progress. Unless otherwise specified, a diversion must discharge into the same natural drainageway in which its headworks are located.

### 3. DEWATERING THE CONSTRUCTION SITE

Foundations, cutoff trenches and other parts of the construction site shall be dewatered and kept free of standing water or excessively muddy conditions as needed for proper execution of the construction works. The Contractor shall furnish, install, operate and maintain all drains, sumps, pumps, casings, well points, and other equipment needed to perform the dewatering as specified. Dewatering methods that cause a loss of fines from foundation areas will not be permitted.

### 4. DEWATERING BORROW AREAS

Unless otherwise specified in the special provisions, the Contractor shall maintain the borrow areas in drainable condition. Otherwise, the contractor shall provide for timely and effective removal of surface and groundwaters that accumulate from any source. Borrow material shall be processed as necessary to achieve proper and uniform moisture content for placement.

### 5. EROSION AND POLLUTION CONTROL

Removal of water from the construction site, including the borrow areas shall be accomplished in such a manner that erosion and the transmission of sediment and other pollutants are minimized. The provisions of the National Pollution Discharge Elimination System (NPDES) regulations for construction sites, enacted by EPA shall be addressed. Operations shall also conform to regulations established by the U.S. Army Corps of Engineers (USACOE) and the Montana Department of Environmental Quality (DEQ), if applicable.

### 6. REMOVAL OF TEMPORARY WORKS

After the temporary works have served their purposes, the Contractor shall remove or level and grade them to the extent required to present a slightly appearance. Care will be taken to prevent any obstruction of the flow of water or any other interference with the operation of, or access to, the permanent works.

Except as otherwise specified, abandonment of temporary wells shall conform to all Federal and State regulations. Abandoned wells must be completely filled with concrete or grout to within the last 3 feet of

the surface. The last 3 feet shall be filled in with naturally occurring soils.

**7. MEASUREMENT AND PAYMENT**  
(Used only if applicable)

For items of work for which specific unit prices are established, each item will be measured to the nearest unit applicable. Payment for each item will be made at the agreed-to unit price for that item. For items of work for which specific lump sum prices are established, payment will be made at the lump sum price.

Such payment will constitute full compensation for all materials, labor, equipment, tools, and all other items necessary and incidental to the completion of the work.

Compensation for any item of work shown on the drawings or described in the special provisions but not listed on the bid schedule will be considered incidental to and included in the pay items listed on the bid schedule.