SECTION 02145

pipeline dewatering

# GENERAL

## SECTION INCLUDES

### Materials, installation, maintenance, operation, and removal of temporary dewatering systems for draining of domestic and recycled water pipelines.

## RELATED REQUIREMENTS

### Section 01000 – General Requirements

### Section 01300 – Shop Drawings and Submittals

### Section 02223 – Trenching, Backfilling and Compaction

### Section 02140 – Groundwater Dewatering

### Section 02150 – Sheeting, Shoring and Bracing

### Section 15000 – General Piping Requirements

## REFERENCES

### The publications listed below form part of this specification to the extent referenced and are referred to in the text by the basic designation only. Reference shall be made to the latest edition of said standards unless otherwise called for.

### State of California, Department of Transportation, Storm Water Quality Handbooks.

#### Construction Site Best Management Practices Manual.

#### Dewatering Manual.

#### Field Guide to Construction Site Dewatering.

## SUBMITTALS

### All submittals shall be submitted in accordance with Section 01300, “Shop Drawings and Submittals”.

### Submit a working drawing and related supporting information detailing the proposed plan and methodology for dewatering, treatment, and disposal of accumulated water.

#### Identify the location, type and size of dewatering devices and related equipment.

#### The size and type of materials composing the collection system.

#### The size and type of equipment to be used to retain and treat accumulated water.

#### The proposed disposal locations.

### Submit completed permits governing the disposal of groundwater from Agencies of Jurisdiction.

## QUALITY ASSURANCE

### The Contractor shall conduct a demonstration of its proposed system.

#### The Contractor shall provide verification that adequate personnel, materials, and equipment are available.

### The Contractor shall maintain adequate control of the dewatering operation.

#### To ensure that erosion is controlled.

#### To ensure that flooding or damage to structures does not occur.

### Conducting the dewatering operation in a manner which will protect adjacent structures and facilities rests solely with the Contractor.

#### The cost of repairing any damage to adjacent structures and restoration of facilities shall be the responsibility of the Contractor.

## DESIGN CRITERIA

### Dewatering, treatment, and disposal of water shall be performed in conformance with all applicable local, state, and Federal laws and permits issued by Jurisdictional Regulatory Agencies.

#### A permit is required from the Regional Water Quality Control Board for discharge of domestic water pipelines to storm drains or surface waters.

#### Recycled water pipelines shall not be discharged to storm drains or surface waters.

#### Contractor shall attain approval from the Agency of Jurisdiction prior to discharging domestic and recycled water pipelines into the sewer system, including conforming to any required discharge flow rate restrictions.

#### Discharge from pipeline dewatering shall not be applied to land without the approval of the landowner or the Agency of Jurisdiction.

# PRODUCTS

## MATERIALS

### The Contractor shall provide measuring devices as required.

### Piping, pumping equipment and all other materials required to provide control of water shall be suitable for the intended purpose.

### Standby pumping systems and a source of standby power shall be maintained on the site at all times.

#### The standby equipment shall be of reasonable size and quantity to prevent damage, should pumping equipment fail.

### Dewatering equipment shall not cause a noise nuisance.

# EXECUTION

## DESIGN REQUIREMENTS

### The Contractor shall provide and maintain at all times during construction ample means and devices to promptly remove and dispose of all water from the pipelines requiring dewatering.

#### The cost of dewatering activities shall be borne by the Contractor.

## DEWATERING OF pipelines

### The District will isolate existing pipelines requiring dewatering, the Contractor shall not operate any existing valves.

### The Contractor shall assume a leak-proof closure of the existing pipeline is not possible and shall account for a continuous flow of 20 gallons per minute to bypass the valves at the isolation locations. Nuisance water entering the excavation shall be dewatered per Section 02140 – Groundwater Dewatering.

### The Contractor shall maintain an adequate system to dewater the existing domestic or recycled water pipelines as shown on the contract drawings.

### The Contractor shall provide all means of routing and disposing of water as required, including temporary piping, traffic control, water quality sampling and testing, filtering, and permitting.

### Water and debris shall be disposed of in a suitable manner in compliance with permit requirements without damage to adjacent property.

#### No water shall be drained into work being built or other construction.

#### Before disposal, water shall be treated in accordance with permit requirements.

### Notify the District at least 48 hours in advance of planned pipeline dewatering activities.

### Upon completion of the dewatering operation, all temporary works and dewatering facilities shall be removed in a manner satisfactory to the District.

END OF SECTION