***ADD THE FOLLOWING SECTION TO DIVISION II – CONSTRUCTION DETAILS***

### SECTION 270 – DEWATERING

**DESCRIPTION**

**270.01.01 GENERAL**

 Note to spec writer: Temporary permits are for groundwater discharge less than 250gpm and the verbiage below applies since the contractor will get the permit. If the discharge is more than 250gpm, or if there are pollutants in the groundwater, CLV will have to get a permit to discharge in either the storm drain or the sanitary sewer and verbiage below has to be modified as such.

A. This work shall consist of furnishing all materials, labor, equipment and supervision to design, install, operate, remove dewatering systems and to lower the water table sufficient to prevent ground water from entering excavations.

B. The work shall also consist of, but is not necessarily limited to, the proper disposal of groundwater removed by a dewatering system **in accordance with local, state, and federal regulations**. Prior to discharging groundwater, the Contractor shall be responsible for obtaining the groundwater discharge permit from the Nevada Division of Environmental Protection, comply with the conditions of the permit and pay all costs associated with the permit requirements such as permit fees, laboratory analysis and treatment of the discharge water, if required. The permit application can be downloaded at: ndep.nv.gov/BWPC. Sampling and laboratory analysis shall be completed by Nevada Certified Environmental Manager and Certified Laboratory.

C. Dewatering shall conform to the requirements of Section 208 “Trench Excavation and Backfill” and Section 502 “Concrete Structures” unless otherwise specified herein.

**MATERIALS**

**270.02.01 GENERAL**

A. At or prior to the preconstruction conference, the Contractor shall submit the dewatering plan showing method of dewatering, piping locations, discharge points, sewer and storm drainage facilities utilized and estimated discharge quantities.

**CONSTRUCTION**

**270.03.01 GENERAL**

A. Dewatering for structures and pipelines shall commence when groundwater is first encountered and shall be continuous until such times as water can be allowed to rise in accordance with the following provisions. Dewatering shall be conducted such that no concrete footings or floors or pipelines are placed in water nor shall water be allowed to rise over them until the concrete or mortar has set at least eight (8) hours. Water will not be allowed to rise in pipeline trenches or drained excavations until pipelines or facilities are backfilled or restrained to prevent flotation.

B. The Contractor shall remove all dewatering equipment and materials at the completion of the work or as otherwise directed by the Engineer.

C. The dewatering system shall be kept in operation until all work in the excavation is backfilled and properly compacted to a point three (3) feet above the existing water table elevation.

D. The Contractor shall arrange for and provide all necessary utilities to operate the dewatering system.

**270.03.02 POINT OF DISCHARGE**

A. The Contractor shall dispose of groundwater removed by the dewatering system in accordance with local, state and federal regulations.

**METHOD OF MEASUREMENT**

**270.04.01 MEASUREMENT**

The quantity of DEWATERING will be measured per lump sum.

**BASIS OF PAYMENT**

**270.05.01 PAYMENT**

The accepted quantity of DEWATERING will be paid for at the contract unit price per lump sum and shall include all permits, testing, system design, water treatment, materials, labor, equipment, supervision, ditching and appurtenant work required for dewatering.

Payment will be made under:

|  |  |  |
| --- | --- | --- |
| **ITEM NO.** | **ITEM DESCRIPTION** | **UOM** |
| 270.0005 | DEWATERING | LS |

**END OF SECTION 270**

**OR IF NOT MEASURING FOR PAYMENT USE THE FOLLOWING:**

**METHOD OF MEASUREMENT**

**270.04.01 MEASUREMENT**

No direct measurement shall be made for Dewatering.

**BASIS OF PAYMENT**

**270.05.01 PAYMENT**

Unless otherwise provided in the Special Provisions, no payment will be made for Dewatering as such. The cost thereof shall be considered as included in the price bid for construction or installation of the items to which Dewatering is required.

**END OF SECTION 270**