PART 1 – GENERAL N/A

PART 2 - PRODUCTS N/A

PART 3 – EXECUTION

* 1. It is the Contractor’s responsibility to determine the extent of dewatering necessary and include the cost of such work in the Base Bid.
	2. Prevent surface water and subsurface or ground water from flowing into excavations and from flooding the project site and surrounding area.
	3. In no event shall the contractor allow water to accumulate in excavations. Remove water to prevent softening of foundation bottoms and soil changes detrimental to the stability of subgrades. Provide and maintain dewatering system components necessary to convey water away from excavations.
	4. Any water which accumulates in the excavations for structures, pipes, and utilities, shall be removed promptly by well point system or by other means satisfactory to the Engineer in such a manner as to not create a nuisance to adjacent property or public thoroughfare. Pumps and engines for well point systems shall be operated with mufflers and at a minimum noise level suitable to a residential area. The Contractor shall be responsible for any nuisance created due to the disposal of water from his dewatering system.
	5. All excavations or trenches of 4’ or deeper shall be appropriately benched, shored, or sloped according to the procedures and requirements set forth in OSHA’s Excavation standard, 29 CFR 1926.650,. 651, and .652.

DEWATERING

A. Provide an adequate system to lower and control groundwater in order to permit excavation, construction of structures, and placement of fill materials under dry conditions. Install sufficient dewatering equipment to pre-drain water bearing strata above and below bottom of structure foundations, drains, sewers, and other excavations.

B. Reduce hydrostatic head in water-bearing strata below structure foundations, drains, sewers and other excavations to extent that water level and piezo metric water levels in construction areas are below prevailing excavation surface.

* Maintain piezo metric water level a minimum of 2-feet below surface of excavation.

C. Prior to excavation below groundwater level, place system into operation to lower water levels as required and then operate it continuously 24 hours a day, 7 days a week until drains, sewers and structures have been constructed, including placement of fill materials, and until dewatering is no longer required.

D. Dispose of water removed from excavations in a manner to avoid endangering public health, property, and portions of work under construction or completed. Dispose of water in a manner to avoid inconvenience to others engaged in work about site. Provide sumps, sedimentation tanks, and other flow control devices as required by governing authorities.

E. Provide standby equipment on site, installed and available, for immediate operation if required to maintain dewatering on a continuous basis in event any part of system becomes inadequate or fails. If dewatering requirements are not satisfied due to inadequacy or failure of dewatering system, perform work as may be required to restore damaged structures and foundation soils at no additional expense.

BEDDING

1. The bottom of the trenches shall be excavated to a depth 6 inches below the outside bottom of the pipe barrel. The resulting excavation shall be backfilled with pipe bedding material up to the level of the lower one-third of the proposed pipe barrel. This backfill material shall be tamped and compacted to provide proper bedding for the pipe and shall then be shaped to receive the pipe.
2. Bell holes and depressions for joints shall be dug after the trench bottom has been graded and in order that the pipe rest upon the prepared bottom for as nearly its full length as practicable, shall be only of such length, depth, and width as required for properly making the particular type of joint.

**END OF SECTION**