

CHAPTER 5

WATER SYSTEM DESIGN PROCEDURE

5-1. General. Water supply is an essential feature of any large project and water system planning should be coordinated with the design of the project elements in order to insure orderly progress toward project completion. Major elements of the water system, such as supply works, usually can be located and designed in advance of detailed project site planning. On the other hand, the design of the distribution system must be deferred until completion of topographic surveys and the development of the final site plan.

5-2. Selection of materials and equipment. Selection of materials, pipe, and equipment should be consistent with system operating and reliability considerations, energy conservation, and the expected useful life of the project. To avoid delivery delays, standard equipment that can be supplied by several manufacturers should be specified. Delivery schedules must be investigated prior to purchase commitments for mechanical equipment.

5-3. Energy conservation. For the water supply system considered, energy requirements will be clearly identified and the design analysis will include consideration of all energy conservation measures consistent with system adequacy and reliability.