

IRRIGATION SYSTEMS

Booster Pump Station: Each irrigation system typically incorporates a booster pumping station with a specialized control system located in a heated equipment room or enclosure.

Backflow Prevention: An appropriate backflow prevention device (typically an RPZ type backflow preventer) should be provided at the booster pumping station as required by the *Illinois Plumbing Code*.

Safety Controls: System safety controls should be provided at the booster pumping station that incorporate system shut down upon sensing loss of adequate supply water pressure to the booster pump and system shut down upon sensing high water temperature at the pump discharge (due to inadequate system flow).

Distribution System: Irrigation distribution systems should be constructed of schedule 80 PVC piping with solvent cement fittings. They should be generously sized to yield a relatively uniform water pressure at all irrigation heads throughout the system. They should incorporate a valved system drain at each low point to facilitate draining / blowing out of the entire system for freeze protection.

Zoning: Each irrigation system should be zoned so as to consider both the installed cost of the system (directly related to the capacity of the pumping station and distribution mains) and the time required to irrigate the entire area served by the system (indirectly related to the number of heads that can be energized simultaneously).

Documentation and Submittals: The AE shall review the *Project Submittal Requirements*.