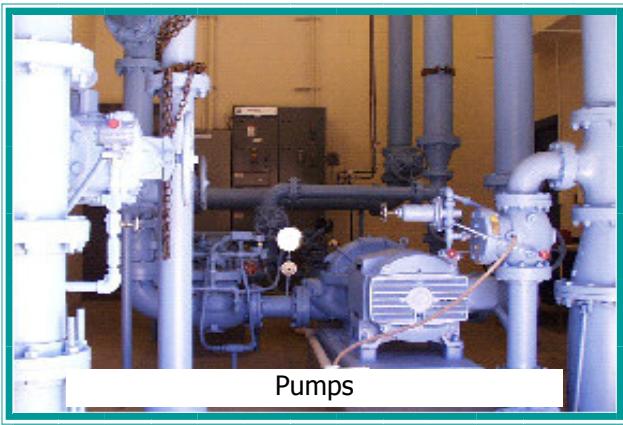
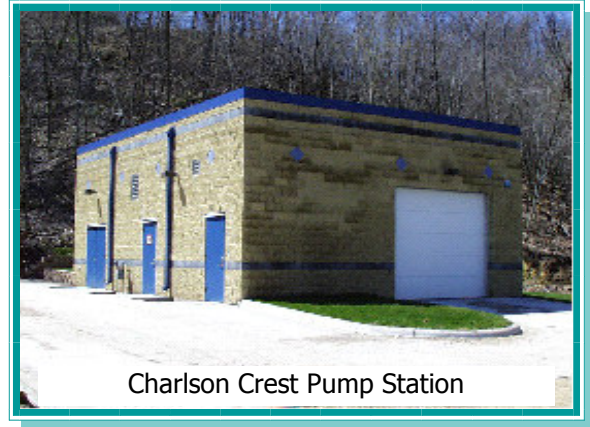


# Charlson Crest Pump Station Red Wing, MN

Charlson Crest is a 100 lot subdivision atop one of the bluffs overlooking the City on the west side of Red Wing. Because of Charlson Crest's elevation and remote location, a booster station was needed to provide fire and domestic water supply. Progressive Consulting Engineers, Inc. (PCE) was hired by the City of Red Wing to design a booster station to meet the water demands of the subdivision from its inception through the development of all 100 lots.

The station was designed to provide a domestic flow of up to 400 gpm and a fire flow capacity of 1,000 gpm through nearly a mile of pipe. The pumps were designed to boost the pressure by approximately 65 psi. Discharge pressures at the pump station were over 100 psi. Special design considerations were given to a gradual increase in demand as new houses are constructed.

The 31' x 41' station was designed with a future expansion and water treatment plant in mind. A new well and future treatment plant for iron and manganese removal is proposed at the site. A room for an ammonia addition and another room for chlorine injection was provided. The garage (which presently houses a generator) was designed to accommodate a pressure filter. Piping provisions will make a future well connection easy.



The pump station was designed with low maintenance exterior. Special attention was paid in selecting equipment, which required minimal maintenance. The station is connected to the City Supervisory Control and Data Acquisition (SCADA) system and can be remotely controlled if necessary.

The Charlson Crest Pump Station is fully operational and performing as designed.

**Client:** City of Red Wing  
**Client Contact:** Denny Tebbe, Public Works Director  
**Construction Year:** 1997  
**Fee:** \$326,000



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