

TO: Committee of the Whole - PU

FROM: Gary Holm

DATE: February 9, 2021

RE: Discussion
South Shumway Avenue
City Electric and Water Utilities

Staff has received inquiries over the past few weeks from Aldermen concerning the City's electric and water utilities on South Shumway Ave. I was asked to put together a brief summary of the City's utilities and their importance to our community.

Electric

The City's electric system has a total of four (4) distribution substations. The distribution substations transform power from 34,000 volts down to 12,000 volts. The substations are all connected with at least two separate 34,000 volt feeder lines. The substation on South Shumway Ave, which is known as the City's "main" substation, is unique in that all of the City's feeder lines pass through it. As part of a large project in 2006/07 feeder lines were extended into the main substation from both the west and east sides of town.

Approximately a decade ago there were conceptual discussions ongoing about the possibility of downtown redevelopment. As part of those discussions the idea of relocating main substation was explored. The cost estimate to relocate the substation at that time was in the \$5M-\$7M range. The relocation project never moved forward. The cost to relocate the substation in 2021 dollars is likely closer to the \$7M figure.

Water

In 2006/07 the City's water treatment plant on W. Fabyan Parkway was upgraded to address radium removal requirements. As part of that project several of the City's older shallow water wells were decommissioned. The decommissioned wells were located in the center and east portions of town. In order to provide adequate water service to all citizens a new crosstown watermain was constructed. The crosstown watermain runs into the Booster Station located on South Shumway Ave. The ground elevation at the Booster Station is approximately 55' lower than it is at the water treatment plant. Water is pumped from the Booster Station back uphill to the far east side of town which is approximately 115' higher. The Booster Station is a critical component of the City's water system and is vital to ensuring adequate water pressures throughout the system.

Relocation of the Booster Station is not possible without also reconstructing a portion of the crosstown watermain. Relocation in close proximity to the existing facility is likely to cost \$2M or more.