

GROUND STORAGE RESERVOIR

ADEL, IOWA



REFERENCE

Kip Overton
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COST

\$1.48M

DURATION

2019-2020

PROJECT TEAM

Gary Brons, MBA (Principal)
Michael Washburn, PE (Project Manager)
Austyn Wolfe, PE (Project Engineer)

PROJECT OVERVIEW

Due to its proximity to the Des Moines Metropolitan Area, Adel is experiencing significant residential and commercial growth. As a result, demands upon the existing water source, treatment and distribution system have increased and nearing system capacity. In addition, much of this critical infrastructure has exceeded its intended useful life and is in need of upgrade or replacement.

Recognizing the importance of planning in addressing existing system needs and the demands of the growing community, the City of Adel retained McClure to evaluate its water system and complete a system wide hydraulic model and master plan. Through the completion of this plan, nearly \$25M of water system improvements which includes two new water supply wells; a new raw water transmission main; a new reverse osmosis water treatment plant; a new 0.75MG Ground Storage Reservoir (GSR); a new high service pumping facility; a new finished water transmission main to focus on the high pressure zone of the distribution system; and multiple water distribution system main replacements.

The GSR is a prestressed concrete tank design and will be used as a post treatment finished water storage facility and source for high service pumping into the distribution system. McClure performed engineering services from planning through construction.

PROJECT HIGHLIGHTS:

- 0.75 MG Ground Storage Reservoir
- Prestressed concrete design selected for cost effectiveness and expedited construction schedule
- Pax active mixing system included in design and construction