



# Memorandum

<b>To:</b> Jill Wolf, City Administrator, City of Luverne	<b>Project Reference:</b> Luverne 2nd Connection to
<b>Copies To:</b> Darrel Ykema, Water/Wastewater Supervisor	Lewis and Clark Regional Water
<b>From:</b> Matt Ellingson, PE	Updated Construction Cost Estimate
<b>Date:</b> January 24, 2023	<b>TKDA Project No.:</b> 16576.009

## Updated 2nd Connection from Lewis and Clark Regional Water System to the Luverne South Water Treatment Plant Background and Cost Estimate

Luverne currently has one watermain that supplies water from the Lewis and Clark Regional Water System to the North Water Treatment Plant. Lewis and Clark is a non-profit organization that provides water to 15 Cities and rural water systems in Southeast South Dakota, Northwest Iowa, and Southwest Minnesota with another 5 members to yet to be hooked up by 2025. It represents a unique regional approach to address common problems of water quality and quantity in a more effective and cost efficient way than each member could do alone. The Lewis and Clark water treatment plant is located outside of Vermillion, South Dakota and started operating in 2012. Luverne connected to the Lewis and Clark water system in March of 2016 at the North Water Treatment Plant. Since then it has been the primary source of water for the City.

Under the agreement with Lewis and Clark, Luverne is allocated up to 821,000 gallons of water per day. At the completion of the Lewis and Clark water system construction, if there is additional water capacity available, Luverne may be able to increase their allocated amount of water and having a 2nd connection to the South Water Treatment Plant would help facilitate this.

The Luverne South Water Treatment Plant has not been used for a number of years and the City would like to provide water from the Lewis and Clark water pipeline located just under four miles South and West of the South Water Treatment Plant. This new watermain would increase the redundancy for the City in the event of a watermain break on the other service line going to the North Water Treatment Plant and would also allow the City to operate the South Water Treatment Plant with water blended from the south well field wells. There are also some large industrial customers that may be increasing their water demand in the future and the City needs to plan to have water available for those customers.

Modifications would be needed at the South Water Treatment plant to make it operational again including adding a new larger 250,000 gallon storage tank to blend the City well water with the Lewis and Clark water. Electrical and piping modifications should also be done inside the water plant as it has not been used in a number of years.

Construction costs, like most everything, have gone up considerably in the past couple of years due to production issues, backordered material, supply chain issues, and labor costs. The City of Luverne is looking for funding options to help pay for this project that has been planned to occur for over a decade.

Here are the estimated project costs:

Item	Price
3.8 miles of 14" PVC watermain including mobilization, excavation, furnish and installation of pipe, backfill and site restoration	\$3,410,000
Meter House Building	\$820,000
Easement Acquisition	\$250,000
New 250,000 gallon storage tank	\$1,200,000
South Water Treatment Plant Improvements	\$250,000
Construction Subtotal	\$5,930,000
10% Engineering and Administration	\$593,000
10% Contingency	\$593,000
<b>Total Project Cost</b>	<b>\$7,116,000</b>

