



300 23rd Ave E, Suite 100
West Fargo, ND 58078-7820
701 232 5353
KLJENG.COM

Memorandum

Date: 3/16/2022
To: Julie Lammers – City of Vergas
Copy to: File
From: Scott Kolbinger, PE
RE: West Lake Street Development – City Water & Sewer

Remarks

Ms. Lammers,

KLJ has prepared an estimate to serve the West Lake Street property with water and sanitary sewer for residential housing. A 28 lot subdivision layout was provided by the developer and we utilized that to determine what would be needed to extend the water and sanitary sewer from Glenn Street through the development. At this time, we have not quantified the necessary roadway improvements as the developer is considering the cost implications of utilizing City water and sewer.

The topography in the area does not allow for a gravity extension of the sanitary sewer. A lift station will be needed and is preliminary located at a low point in Glenn Street approximately 400' west of the east property line of the proposed subdivision. The majority of the property will be able to gravity drain to this location while maintaining the sanitary sewer main at a reasonable depth. The last four lots along West Lake Street (previously the City property) are problematic due to the existing grade change in the area. Our estimate accounts for the City providing a 2" forcemain in West Lake Street that the four individual home owners would be able to connect to with individual grinder pumps. If the City felt that gravity sewer is required for these properties, we would recommend a second lift station. This lift station would be much smaller than the previously mentioned lift station. We provided an alternate cost for this additional infrastructure.

The water system extension would begin at Glenn Street and continue through the development. The "high ground" within the subdivision is roughly the same elevation as the water tower base so water pressure should be adequate. Fire hydrants have been placed at approximately 400' intervals along the roadway to provide fire protection and allow the system to be maintained.

I would also like to note that it appears there are wetlands onsite that may be impacted by the project. The applicable agencies should be coordinated with during the design of this project to ensure that the necessary mitigation actions are addressed.

West lake Street Development
City Water & Sewer Estimate of Probable Construction Costs
Vergas, MN

Description	Units	Quantity	Unit Price	Total
Mobilization	LS	1	\$ 95,000.00	\$ 95,000.00
8" PVC C-900 Watermain	LF	4535	\$ 45.00	\$ 204,075.00
6" PVC C-900 Watermain	LF	120	\$ 40.00	\$ 4,800.00
1" Water Service	LF	924	\$ 18.00	\$ 16,632.00
1" Curb Stop & Box	EA	28	\$ 600.00	\$ 16,800.00
8" Gate Valve	EA	12	\$ 2,400.00	\$ 28,800.00
6" Gate Valve	EA	12	\$ 1,800.00	\$ 21,600.00
6" Hydrant	EA	12	\$ 5,500.00	\$ 66,000.00
Connect to Ex Water	EA	1	\$ 1,500.00	\$ 1,500.00
8" SDR-35 PVC Sanitary	LF	3546	\$ 50.00	\$ 177,300.00
4" SDR-35 PVC Sanitary	LF	924	\$ 45.00	\$ 41,580.00
48" Manhole	EA	13	\$ 6,000.00	\$ 78,000.00
Connect to Ex Sanitary	EA	1	\$ 1,500.00	\$ 1,500.00
Lift Station	EA	1	\$ 225,000.00	\$ 225,000.00
2" Forcemain	LF	960	\$ 22.00	\$ 21,120.00
4" Forcemain	LF	422	\$ 50.00	\$ 21,100.00
Subtotal				\$ 1,020,807.00
Contingency			25%	\$ 256,000.00
Estimated Total				\$ 1,276,807.00

Alternate 1

Lift Station for 4 lots	EA	1	\$ 80,000.00	\$ 80,000.00
8" SDR-35 PVC Sanitary	LF	570	\$ 50.00	\$ 28,500.00
2" Forcemain	LF	-360	\$ 22.00	\$ (7,920.00)
48" Manhole	EA	3	\$ 6,000.00	\$ 18,000.00
Subtotal				\$ 118,580.00
Contingency			25%	\$ 30,000.00
Estimated Total				\$ 148,580.00
Combined Total				\$ 1,425,387.00

Notes:

- 1 Wetland delineation/mitigation design not included.
- 2 Grading and roadway costs not included.
- 3 Lift Station costs do not include getting power to the lift station from the utility company
- 4 A 25% Contingency is added to account for legal, administration, financing, engineering and other contingent costs.
- 5 In providing estimates of probable construction cost, the Client understands that the Consultant has no control over the cost or availability of labor, equipment or materials, or over market conditions or the Contractor's method of pricing and that the Consultant's estimates of probable construction costs are made on the basis of the Consultant's professional judgment and experience. The Consultant makes no warranty, express or implied, that the bids or the negotiated cost of the Work will not vary from the Consultant's estimate of probable construction cost. The Client assumes all liability if using this Probable Construction Cost for determining project feasibility or securing project funding/financing.

