

ENGINEER'S REPORT

The undersigned is the engineer for the City of West Fargo, Cass County, North Dakota, and submits the following report to the Board of City Commissioners of said city:

The reason for the improvements is to reroute the existing sanitary sewer force main from existing sanitary lift station SA-11 to avoid the Brookwood area, reroute the existing gravity sanitary sewer that services the Geller's area with a new lift station to avoid the Brookwood area, modifying existing sanitary lift stations SA-11 and SA-47 to accommodate the change in flow due to this rerouting, and moving the location of the existing compost site.

Sanitary Sewer Improvement District No. 1319 will involve the construction of improvements consisting of storm sewer, water mains, gravity sanitary sewer, sanitary sewer force main installed via directional drill and/or open cut, concrete streets, curb and gutter, sidewalks, sanitary sewer lift station, sanitary sewer lift station modifications, asphalt pavement, and other miscellaneous installations. Also included in the project is the reconstruction of the 9th Street East and 1st Avenue intersection roadway and utilities which is currently planned to be paid for with City funds.

Based upon the estimate of the probable cost, attached hereto and made a part thereof, and the engineering information and studies, the work proposed in said district is feasible.

Dated this 4th day of June, 2018.

Dustin Scott
Moore Engineering, Inc.
West Fargo ND



Engineer for the City of West Fargo, ND

SANITARY SEWER IMPROVEMENT DIST. NO. 1319
GELLER'S AND MEADOW RIDGE AREA SEWER IMPROVEMENT (SA-48), (SA-47), & (SA-11)
WEST FARGO ND

Engineer's Opinion of Probable Cost

ITEM	UNIT	ESTIMATED QUANTITY	UNIT PRICE	TOTAL
<u>9th St Intersection Utility Items</u>				
1. Sanitary Sewer - Remove	LF	35	\$10.00	\$350.00
2. Sanitary Sewer - 8" PVC SDR 35	LF	36	\$45.00	\$1,620.00
3. Sanitary Sewer Manhole - Remove	Each	1	\$750.00	\$750.00
4. Sanitary Sewer Manhole	Each	1	\$4,000.00	\$4,000.00
5. External Manhole Chimney Seal	Each	1	\$250.00	\$250.00
6. Televising - Sanitary Sewer Main	LF	36	\$1.50	\$54.00
7. Water Main - Remove	LF	72	\$20.00	\$1,440.00
8. Water Main - Connect To Existing	Each	1	\$1,000.00	\$1,000.00
9. Water Main - 8" PVC C900	LF	43	\$30.00	\$1,290.00
10. Water Main - 12" PVC C900	LF	16	\$75.00	\$1,200.00
11. Storm Sewer - Remove	LF	107	\$15.00	\$1,605.00
12. Storm Sewer - 36" RCP	LF	121	\$80.00	\$9,680.00
13. Storm Sewer Manhole - Remove	Each	1	\$500.00	\$500.00
14. Storm Sewer Manhole - Connect to Existing	Each	2	\$1,500.00	\$3,000.00
15. Storm Sewer Manhole - 84"	Each	2	\$7,500.00	\$15,000.00
16. External Manhole Chimney Seal	Each	2	\$250.00	\$500.00
17. Rock Bedding - 1.25"	LF	97	\$10.00	\$970.00
<u>9th St Intersection Roadway Items</u>				
1. Curb & Gutter - Remove	LF	230	\$7.50	\$1,725.00
2. Concrete Pavement - Remove	SY	900	\$15.00	\$13,500.00
3. Subgrade Preparation	SY	1,000	\$2.00	\$2,000.00
4. Reinforcement Fabric	SY	1,000	\$2.00	\$2,000.00
5. Gravel - 9" NDDOT Class 5	CY	240	\$32.00	\$7,680.00
6. Curb & Gutter - Highback Inflow	LF	310	\$15.00	\$4,650.00
7. Concrete Pavement - Connect To Existing	Each	3	\$2,000.00	\$6,000.00
8. Concrete Pavement - 8" Non-Reinforced	SY	900	\$60.00	\$54,000.00
9. Sidewalk - 4" Concrete	SY	60	\$40.00	\$2,400.00
10. Curb Ramp - 6" Concrete	SY	20	\$60.00	\$1,200.00
11. Detectable Warning Panel	SF	44	\$60.00	\$2,640.00
12. Driveway - 7" Concrete	SY	20	\$60.00	\$1,200.00
13. Gravel - 6" NDDOT Class 5	CY	20	\$32.00	\$640.00
<u>9th St Intersection General Items</u>				
1. Cleaning	LSum	1	\$500.00	\$500.00
2. Storm Water Management	LSum	1	\$250.00	\$250.00
3. Traffic Control	LSum	1	\$2,500.00	\$2,500.00
4. Inlet Protection Device	Each	8	\$125.00	\$1,000.00
5. Stabilized Construction Entrance	Each	1	\$1,000.00	\$1,000.00
<u>Geller's and Meadow Ridge Lift Station & Sanitary Sewer Items</u>				
1. Sanitary Sewer - Abandon	LF	150	\$10.00	\$1,500.00
2. Sanitary Sewer - Remove	LF	110	\$10.00	\$1,100.00
3. Sanitary Sewer Force Main - Abandon	LSum	1	\$5,000.00	\$5,000.00
4. Sanitary Sewer Lift Station (SA-48)	LSum	1	\$160,000.00	\$160,000.00
5. Meadow Ridge Pump Swap (SA-11)	LSum	1	\$40,000.00	\$40,000.00
6. SA47 Pump Replace	LSum	1	\$100,000.00	\$100,000.00
7. Sanitary Sewer Manhole - Polymer	Each	1	\$10,000.00	\$10,000.00
8. Sanitary Sewer - 8" PVC	LF	50	\$45.00	\$2,250.00
9. Sanitary Sewer Force Main - 8" PVC	LF	100	\$60.00	\$6,000.00
10. Sanitary Sewer Force Main - 6" PVC	LF	1,350	\$45.00	\$60,750.00
11. Televising - Sanitary Sewer Main	LF	1,600	\$1.50	\$2,400.00
<u>Geller's and Meadow Ridge Roadway Items</u>				
1. Asphalt Pavement - Remove	SY	150	\$7.00	\$1,050.00
2. Curb & Gutter - Remove	LF	150	\$7.50	\$1,125.00
3. Concrete Pavement - Remove	SY	1,250	\$15.00	\$18,750.00

4.	Aggregate Surface - Remove	SY	425	\$4.00	\$1,700.00
5.	Subgrade Preparation	SY	1,825	\$2.00	\$3,650.00
6.	Reinforcement Fabric	SY	1,825	\$2.00	\$3,650.00
7.	Gravel - 9" NDDOT Class 5	CY	450	\$32.00	\$14,400.00
8.	Concrete Pavement - Connect To Existing	Each	2	\$2,000.00	\$4,000.00
9.	Concrete Pavement - 6" Non-Reinforced	SY	1,000	\$55.00	\$55,000.00
10.	Concrete Pavement - 8" Non-Reinforced	SY	150	\$60.00	\$9,000.00
11.	Curb & Gutter	LF	100	\$15.00	\$1,500.00
12.	Asphalt Base Course - 4"	SY	125	\$15.00	\$1,875.00
13.	Asphalt Wear Course - 2"	SY	125	\$9.00	\$1,125.00

Compost Site Items

1.	Concrete Pavement - 8" Non-Reinforced	SY	530	\$60.00	\$31,800.00
2.	Driveway - 7" Concrete	SY	80	\$60.00	\$4,800.00
3.	Site Grading	LSum	1	\$1,000.00	\$1,000.00

Geller's and Meadow Ridge General Items

1.	Cleaning	LSum	1	\$500.00	\$500.00
2.	Storm Water Management	LSum	1	\$500.00	\$500.00
3.	Traffic Control	LSum	1	\$500.00	\$500.00
4.	Mowing	Acre	4.5	\$200.00	\$900.00
5.	Watering	Each	6	\$125.00	\$750.00
6.	Excavation - 6" Topsoil Stripping	CY	200	\$5.00	\$1,000.00
7.	Topsoil Replacement - 4"	CY	150	\$6.00	\$900.00
8.	Inlet Protection Device	Each	6	\$125.00	\$750.00
9.	Stabilized Construction Entrance	Each	1	\$1,000.00	\$1,000.00
10.	Seeding - Type II	Acre	0.5	\$2,000.00	\$1,000.00
11.	Mulch - Type B - Hydromulch	Acre	0.5	\$2,000.00	\$1,000.00

Construction Subtotal	\$700,319.00
Contingencies	\$70,031.90
Total Construction	\$770,350.90
Engineering	\$84,738.60
Legal & Administration	\$54,799.97
Bond Discount	\$23,110.53
TOTAL PROJECT	\$933,000.00

ESTIMATED PROJECT FUNDING SUMMARY

Sales Tax Revenue:	
<i>Cost of 9th Street Intersection Items</i>	\$195,000.00
Special Assessments:	
<i>Compost Site, Geller's and Meadow Ridge Improvements</i>	\$738,000.00