

## 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 City of West Fargo and City of Fargo are proceeding with a joint project to reconstruct the existing pavement section on 13<sup>th</sup> Avenue between 45<sup>th</sup> Street South to 12<sup>th</sup> Street East, which is at the end of the service life. The City of Fargo is reconstructing 13<sup>th</sup> Avenue between 45<sup>th</sup> Street and 17<sup>th</sup> Street and they approached the City of West Fargo to expand the project to 12<sup>th</sup> Street East. This expansion would complete the recent reconstruction efforts of the 13<sup>th</sup> Avenue Corridor from 9<sup>th</sup> Street East (West Fargo) to Interstate 29 (Fargo). The City of West Fargo chose to join the Fargo project for this reason as well as construction efficiencies and the economy of scale, minimizing long-term traffic impacts and road closures, among other reasons and City benefits.

Street Improvement District No. 2251 for the West Fargo portion will consist of a reconstructing the existing 4-Lane divided concrete roadway with a new 4-Lane divided concrete roadway. Other items will include curb and gutter, sidewalks, multi-use paths, sanitary sewer, water main, storm sewer, traffic signals, landscaping, street lighting and other miscellaneous installations.

Based upon the estimate of the probable cost, which will be provided at the meeting and made a part thereof, and the engineering information and studies, the work proposed in said district is feasible.

Dated this 20<sup>th</sup> day of November, 2017.

Dustin Scott  
Moore Engineering, Inc.  
West Fargo ND



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Engineer for the City of West Fargo, ND

**STREET IMPROVEMENT DIST. NO. 2251  
13TH AVENUE RECONSTRUCTION - 45TH ST (FARGO) TO 12TH ST E (WEST FARGO)  
WEST FARGO ND**

*Engineer's Opinion of Probable Cost Summary*

**City of Fargo**

1.	13th Avenue Reconstruction - 45th Street to 17th Street	\$6,086,100.00
	Construction Subtotal	\$6,086,100.00
	Contingencies	\$613,900.00
	<b>Construction Cost</b>	<b>\$6,700,000.00</b>
	Engineering	\$737,000.00
	Legal & Administration	\$469,000.00
	Bond Discount	\$134,000.00
	Land Acquisition	\$150,000.00
	<b>City of Fargo - Subtotal Project Cost</b>	<b>\$8,190,000.00</b>

**City of West Fargo**

1.	13th Avenue Reconstruction - 17th Street to 12th Street	\$5,460,900.00
	Construction Subtotal	\$5,460,900.00
	Contingencies	\$539,100.00
	<b>Construction Cost</b>	<b>\$6,000,000.00</b>
	Engineering	\$660,000.00
	Legal & Administration	\$420,000.00
	Bond Discount	\$120,000.00
	Land Acquisition	\$150,000.00
	<b>City of West Fargo - Subtotal Project Cost</b>	<b>\$7,350,000.00</b>
	<b>TOTAL PROJECT COST</b>	<b>\$15,540,000.00</b>

\*See attached documents for detailed construction costs.

\*\*See RFP Cost Proposal Form from Apex Engineering Group, Inc. totally 997,665.00.

**Preliminary Estimate of Quantities and Cost --- November 3, 2017**  
**13th Avenue from 12th Street in West Fargo to 45th Street in Fargo**  
**Grading, PCC Pavement, Water Main, Storm Sewer, Sanitary Sewer, Traffic Signals, Street Lighting, Sidewalks**  
**City of Fargo Project No. BR-18-C0 --- City of West Fargo Project No. 2251**

DESCRIPTION	UNIT PRICE	UNITS	FARGO		WEST FARGO		PROJECT TOTAL	
			QUANTITY	COST	QUANTITY	COST	QUANTITY	COST
<b>WATER MAIN</b>								
F&I New Water System	\$ 1.00	EA	750000	\$ 750,000.00	600000	\$ 600,000.00	1350000	\$ 1,350,000.00
<b>SUBTOTAL =</b>				<b>\$ 750,000.00</b>		<b>\$ 600,000.00</b>		<b>\$ 1,350,000.00</b>
<b>SANITARY SEWER</b>								
F&I New Sanitary Sewer System	\$ 1.00	EA	120000	\$ 120,000.00	110000	\$ 110,000.00	230000	\$ 230,000.00
<b>SUBTOTAL =</b>				<b>\$ 120,000.00</b>		<b>\$ 110,000.00</b>		<b>\$ 230,000.00</b>
<b>STORM SEWER</b>								
F&I 1-1/4" Trench Found Rock	\$ 20.00	LF	320	\$ 6,400.00	280	\$ 5,600.00	600	\$ 12,000.00
Remove Pipe All Sizes All Types	\$ 10.00	LF	3150	\$ 31,500.00	2500	\$ 25,000.00	5650	\$ 56,500.00
F&I Manhole	\$ 5,500.00	EA	10	\$ 55,000.00	10	\$ 55,000.00	20	\$ 110,000.00
Remove Manhole and Inlet	\$ 750.00	EA	22	\$ 16,500.00	20	\$ 15,000.00	42	\$ 31,500.00
F&I Inlet	\$ 3,500.00	EA	12	\$ 42,000.00	10	\$ 35,000.00	22	\$ 77,000.00
F&I Pipe w/GB Lateral Lead	\$ 75.00	LF	900	\$ 67,500.00	1000	\$ 75,000.00	1900	\$ 142,500.00
F&I Pipe w/GB Trunk Line	\$ 120.00	LF	2300	\$ 276,000.00	1800	\$ 216,000.00	4100	\$ 492,000.00
<b>SUBTOTAL =</b>				<b>\$ 494,900.00</b>		<b>\$ 426,600.00</b>		<b>\$ 921,500.00</b>
<b>PAVING</b>								
Excavation	\$ 15.00	CY	5000	\$ 75,000.00	5000	\$ 75,000.00	10000	\$ 150,000.00
Subgrade Preparation	\$ 2.50	SY	25500	\$ 63,750.00	21650	\$ 54,125.00	47150	\$ 117,875.00
F&I Woven Geotextile	\$ 2.50	SY	25500	\$ 63,750.00	21650	\$ 54,125.00	47150	\$ 117,875.00
F&I Class 5 Agg - 12" Thick	\$ 13.00	SY	25500	\$ 331,500.00	21650	\$ 281,450.00	47150	\$ 612,950.00
F&I Curb & Gutter Standard	\$ 24.00	LF	9450	\$ 226,800.00	7750	\$ 186,000.00	17200	\$ 412,800.00
Remove Curb & Gutter	\$ 6.00	LF	9500	\$ 57,000.00	7800	\$ 46,800.00	17300	\$ 103,800.00
F&I Pavement 10" Thick Doweled Conc	\$ 80.00	SY	22110	\$ 1,768,800.00	19450	\$ 1,556,000.00	41560	\$ 3,324,800.00
Remove Pavement	\$ 15.00	SY	19500	\$ 292,500.00	16750	\$ 251,250.00	36250	\$ 543,750.00
F&I Sidewalk 5" Thick Reinf Conc	\$ 55.00	SY	3650	\$ 200,750.00	3600	\$ 198,000.00	7250	\$ 398,750.00
F&I Impressioned 4" Thick Reinf Conc	\$ 105.00	SY	2230	\$ 234,150.00	2050	\$ 215,250.00	4280	\$ 449,400.00
Remove Sidewalk	\$ 10.00	SY	3300	\$ 33,000.00	3300	\$ 33,000.00	6600	\$ 66,000.00
Seeding / Mulch	\$ 10,000.00	LS	0.5	\$ 5,000.00	0.5	\$ 5,000.00	1	\$ 10,000.00
Erosion Control	\$ 30,000.00	LS	0.5	\$ 15,000.00	0.5	\$ 15,000.00	1	\$ 30,000.00
Traffic Control & Flagging	\$ 550,000.00	LS	0.5	\$ 275,000.00	0.5	\$ 275,000.00	1	\$ 550,000.00
F&I Edge Drain 4" Dia PVC	\$ 6.00	LF	4450	\$ 26,700.00	4300	\$ 25,800.00	8750	\$ 52,500.00
Temporary Paving	\$ 250,000.00	LS	0.5	\$ 125,000.00	0.5	\$ 125,000.00	1	\$ 250,000.00
<b>SUBTOTAL =</b>				<b>\$ 3,793,700.00</b>		<b>\$ 3,396,800.00</b>		<b>\$ 7,190,500.00</b>
<b>STREET LIGHTING</b>								
Interim Lighting System	\$ 50,000.00	LS	0.5	\$ 25,000.00	0.5	\$ 25,000.00	1	\$ 50,000.00
F&I Street Light System	\$ 200,000.00	EA	1	\$ 200,000.00	1	\$ 200,000.00	2	\$ 400,000.00
<b>SUBTOTAL =</b>				<b>\$ 225,000.00</b>		<b>\$ 225,000.00</b>		<b>\$ 450,000.00</b>
<b>TRAFFIC SIGNAL IMPROVEMENTS</b>								
F&I Signal System	\$ 300,000.00	EA	1.5	\$ 450,000.00	1.5	\$ 450,000.00	3	\$ 900,000.00
F&I Traffic Signal Interim System	\$ 60,000.00	EA	2	\$ 120,000.00	2	\$ 120,000.00	4	\$ 240,000.00
<b>SUBTOTAL =</b>				<b>\$ 570,000.00</b>		<b>\$ 570,000.00</b>		<b>\$ 1,140,000.00</b>
<b>STRIPING - PAVEMENT MARKINGS</b>								
F&I Pavement Marking	\$ 250,000.00	LS	0.5	\$ 125,000.00	0.5	\$ 125,000.00	1	\$ 250,000.00
<b>SUB-TOTAL =</b>				<b>\$ 125,000.00</b>		<b>\$ 125,000.00</b>		<b>\$ 250,000.00</b>
<b>SIGNING</b>								
F&I Signs	\$ 15,000.00	LS	0.5	\$ 7,500.00	0.5	\$ 7,500.00	1	\$ 15,000.00
<b>SUBTOTAL =</b>				<b>\$ 7,500.00</b>		<b>\$ 7,500.00</b>		<b>\$ 15,000.00</b>

	<u>FARGO</u>	<u>WEST FARGO</u>	<u>PROJECT TOTAL</u>
<b>SUBTOTAL =</b>	\$ 6,086,100.00	\$ 5,460,900.00	\$ 11,547,000.00
<b>10% CONTINGENCY =</b>	\$ 608,610.00	\$ 546,090.00	\$ 1,154,700.00
<b>TOTAL ESTIMATED CONSTRUCTION COST=</b>	<b>\$ 6,694,710.00</b>	<b>\$ 6,006,990.00</b>	<b>\$ 12,701,700.00</b>

\*Costs for Right of Way, private utility relocations, and engineering are not included in this estimate