

Preliminary Report of the Engineer
On the Proposed Joseph Road
Pavement Reconstruction, Sanitary Sewer, and Water Main Assessments
In the City of Pewaukee

In accordance with the resolution passed by the City Council of the City of Pewaukee, we herewith submit our report on assessments for the reconstruction of Joseph Road, curb installation, sanitary sewer extension, water main extension, and drainage improvements to be made in the City of Pewaukee. The bid data shown here is based on bid prices. The inventory data shown here is based on prices paid.

This report consists of the following Schedules:

Schedule "A": Summary of options for assessments and related costs.

Schedule "B": Legal descriptions, dated January and April 2021, and map, dated September 2023, of all parcels within the assessment district.

Schedule "C": Estimated assessment for each parcel affected. Estimates reported assume all property owners to receive water services opt for two-inch services.

The properties against which the assessments are proposed are benefited and the improvements constitute an exercise of Police Powers.

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Director of Public Works/City Engineer
City of Pewaukee
W240N3065 Pewaukee Road
Pewaukee, WI 53072
October 16, 2023

Prepared by:
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Civil Engineer
September 27, 2023

Schedule “A” – Joseph Road

The City of Pewaukee is considering the pavement rehabilitation of Joseph Road. The improvements consist of road reconstruction, curb installation, drainage improvements, water extension, sewer extension, and related facilities.

The cost of road improvements will be apportioned to all property owners abutting the street with direct or indirect access. All non-residential properties shall pay the full road assessment.

The cost of 50% of curb installations will be apportioned to all property owners abutting the street with direct or indirect access. All non-residential property owners shall pay the full separate curb assessment.

Inlet installations, drainage improvements, and 50% of the curb installations will be paid by the Storm Water Management Utility.

Water main extensions to the easternmost hydrant on Joseph Road will be apportioned to all property owners benefiting from the water main extension. Water main extensions beyond the easternmost hydrant on Joseph Road to the connection point from Emberwood Court and the 8-inch main from the mainline under Joseph Road to R Frederick Trucking will be paid by the Water Utility. Sanitary sewer extensions will be apportioned to all property owners benefiting from the sanitary sewer extension.

It is recommended the costs for curb installations, road improvements, sanitary sewer extensions, and water main extensions within Joseph Road right-of-way will be determined on a per-acre basis.

It is recommended the costs for sewer lateral installations and water service installations will be determined on a per-unit basis. Property owners will have the option to select either a two-inch or a six-inch water service.

UNIT RATE COMPUTATIONS

Curb Installation Acreage Rate – Joseph Road

Estimated Curb Installation Costs (see attached breakdown)	\$ 48,258.70
Engineering, Administration, & Contingencies	\$ 14,477.61
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Total Estimated Curb Installation Costs	\$ 62,736.31

$$\frac{\$ 62,736.31}{12.68457 \text{ acres}} = \$ 4,945.88/\text{acre}$$

Use \$ 4,945.88/acre as the Curb Installation Acreage Rate.

Road Rehabilitation Acreage Rate – Joseph Road

Estimated Road Reconstruction Costs (see attached breakdown)	\$ 368,855.73
Engineering, Administration, & Contingencies	\$ 110,656.72
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Total Estimated Road Reconstruction Costs	\$ 479,512.45

$$\frac{\$ 479,512.45}{12.68457 \text{ acres}} = \$ 37,802.81/\text{acre}$$

Use \$ 37,802.81/acre as the Road Rehabilitation Acreage Rate.

Sanitary Sewer Extension Unit Rate – Joseph Road

Estimated Assessable Sanitary Sewer Costs (see attached breakdown)	\$ 199,119.14
Engineering, Administration, & Contingencies	\$ 59,735.74
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Total Estimated Assessable Sanitary Sewer Costs	\$ 258,854.88

$$\frac{\$ 258,854.88}{7.6067 \text{ acres}} = \$ 34,029.85/\text{acre}$$

Use \$ 34,029.85/acre as the Sanitary Sewer Extension Acreage Rate.

Sewer Lateral Unit Rate – Joseph Road

Estimated Assessable Sanitary Lateral Costs (see attached breakdown)	\$ 18,194.76
Engineering, Administration, & Contingencies	\$ 5,458.43
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Total Estimated Assessable Sanitary Lateral Costs	\$ 23,653.19

$$\frac{\$ 23,653.19}{5 \text{ units}} = \$ 4,730.64/\text{unit}$$

Use \$ 4,730.64/unit as the Sewer Lateral Unit Rate.

Water Main Extension Unit Rate – Joseph Road

Estimated Assessable Water Main Costs (see attached breakdown)	\$	174,176.36
Engineering, Administration, & Contingencies	\$	52,252.91
Total Estimated Assessable Water Main Costs	\$	226,429.27

$$\frac{\$ 226,429.27}{7.6067 \text{ acres}} = \$ 29,767.08/\text{acre}$$

Use \$ 29,767.08/acre as the Water Main Extension Acreage Rate.

2-inch Water Service Unit Rate – Joseph Road

Estimated Assessable 2" Water Service Costs (see attached breakdown)	\$	26,789.77
Engineering, Administration, & Contingencies	\$	8,036.93
Total Estimated Assessable 2" Water Service Costs	\$	34,826.70

$$\frac{\$ 34,826.70}{5 \text{ units}} = \$ 6,965.34/\text{unit}$$

Use \$ 6,965.34/unit as the 2-inch Water Service Unit Rate.

6-inch Water Service Unit Rate – Joseph Road

Estimated Assessable 6" Water Service Costs (see attached breakdown)	\$	47,785.30
Engineering, Administration, & Contingencies	\$	14,335.59
Total Estimated Assessable 6" Water Service Costs	\$	62,120.89

$$\frac{\$ 62,120.89}{5 \text{ units}} = \$ 12,424.18/\text{unit}$$

Use \$ 12,424.18/unit as the 6-inch Water Service Unit Rate.

Water Utility – Joseph Road

Estimated Water Utility Costs (see attached breakdown)	\$	361,262.39
Engineering, Administration, & Contingencies	\$	108,378.72
Total Estimated Water Utility Costs	\$	469,641.11

Storm Water Management – Joseph Road

Estimated Drainage Improvement Costs (see attached breakdown)	\$	290,707.05
Engineering, Administration, & Contingencies	\$	87,212.11
Total Estimated Drainage Improvement Costs	\$	377,919.16

COST SUMMARY

Cost Summary

Total Project Costs	\$ 1,995,693.96
Total Curb Assessable Costs (Deduct)	\$ (62,736.35)
Total Road Assessable Costs (Deduct)	\$ (479,512.39)
Total Sanitary Sewer Assessable Costs (Deduct)	\$ (152,606.87)
Total Sanitary Sewer Assessable Costs - Deferred (Deduct)	\$ (106,249.36)
Total Sanitary Lateral Assessable Costs (Deduct)	\$ (23,653.20)
Total Water Main Assessable Costs (Deduct)	\$ (133,490.46)
Total Water Main Assessable Costs - Deferred (Deduct)	\$ (92,939.97)
Total 2-inch Water Service Assessable Costs (Deduct)	\$ (34,826.70)
Total 6-inch Water Service Assessable Costs (Deduct)	\$ (62,120.90)
Total Storm Water Utility Costs (Deduct)	\$ (377,919.16)
Total Water Utility Costs (Deduct)	\$ (469,641.11)
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Net Non-assessable & City Costs	\$ (2.51)

Computation of Costs

Total Estimated Reconstruction Project Costs

<u>Item</u>			<u>Estimated</u>	<u>Bid Unit</u>	
<u>No.</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Price</u>	<u>Bid Price</u>
1	Mobilization	L.S.	1	\$88,300.00	\$ 88,300.00
2	Traffic Control	L.S.	1	\$22,500.00	\$ 22,500.00
3	Barrier Fence	L.F.	400	\$ 4.30	\$ 1,720.00
4	Dewatering/Geotextile Filter Bag Area west of CN Railroad R.O.W.	EA.	1	\$ 500.00	\$ 500.00
5	Dewatering/Geotextile Filter Bag Area east of CN Railroad R.O.W.	EA.	1	\$ 500.00	\$ 500.00
6	Silt Fence	L.F.	540	\$ 2.00	\$ 1,080.00
7	Manufactured Ditch Check	EA.	3	\$ 100.00	\$ 300.00
8	Tracking Pad	S.F.	840	\$ 2.00	\$ 1,680.00
9	Inlet Sediment Guard (Type D)	EA.	7	\$ 115.00	\$ 805.00
10	Full Depth Saw Cutting	L.F.	1700	\$ 2.50	\$ 4,250.00
11	Bentonite Clay Dam	EA.	21	\$ 949.00	\$ 19,929.00
12	Timber Mats	S.Y.	335	\$ 25.00	\$ 8,375.00
13	Dust Control Using Water	1,000 GAL	10	\$ 5.00	\$ 50.00
14	10-inch Sanitary Sewer in Granular Backfill	L.F.	875	\$ 129.00	\$ 112,875.00
15	48-inch Sanitary Sewer Manhole	EA.	4	\$ 5,050.00	\$ 20,200.00
16	6-inch Sanitary Sewer Lateral in Granular Backfill	L.F.	105	\$ 98.50	\$ 10,342.50
17	Sanitary Manhole Outside Drop	V.F.	2	\$ 4,700.00	\$ 9,400.00
18	Remove Sanitary Sewer	L.F.	15	\$ 53.50	\$ 802.50
19	Repair Sanitary Manhole	EA.	1	\$ 2,540.00	\$ 2,540.00
20	Televised Sanitary Piping Inspection	L.F.	980	\$ 3.00	\$ 2,940.00
21	8-inch Water Main in Granular Backfill	L.F.	1050	\$ 95.50	\$ 100,275.00
22	8-inch Water Main in Casing Pipe Jack and Bore	L.F.	130	\$ 1,440.00	\$ 187,200.00
23	8-inch Water Main Directional Drill	L.F.	100	\$ 135.00	\$ 13,500.00
24	6-inch Hydrant Lead in Granular Backfill	L.F.	70	\$ 91.50	\$ 6,405.00
25	Hydrant Assembly with Anchor Tee and 6-inch Valve	EA.	4	\$ 8,920.00	\$ 35,680.00
26	Remove and Replace Hydrant Assembly in Homewood Court	L.S.	1	\$12,600.00	\$ 12,600.00
27	8-inch Water Main Valve	EA.	4	\$ 2,370.00	\$ 9,480.00

Total Estimated Reconstruction Project Costs - Continued

<u>Item</u>			<u>Estimated</u>	<u>Bid Unit</u>	
<u>No.</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Price</u>	<u>Bid Price</u>
28	Pipe Insulation	L.F.	180	\$ 67.50	\$ 12,150.00
29	2-inch Water Service in Granular Backfill	L.F.	155	\$ 72.50	\$ 11,237.50
30	2-inch Tap, Saddle, and Corporation Valve	EA.	5	\$ 255.00	\$ 1,275.00
31	2-inch Curb Valve and Curb Box	EA.	5	\$ 405.00	\$ 2,025.00
32	12-inch Storm Sewer CL IV in granular backfill	L.F.	17	\$ 90.50	\$ 1,538.50
33	12-inch Storm Sewer CL IV in Concrete Encasement	L.F.	95	\$ 147.00	\$ 13,965.00
34	14-inch × 23-inch HERCP Storm Sewer CL IV in Granular Backfill	L.F.	443	\$ 137.00	\$ 60,691.00
35	19-inch × 23-inch HERCP Storm Sewer CL IV in Concrete Encasement	L.F.	322	\$ 208.00	\$ 66,976.00
36	24-inch × 38-inch HERCP Storm Sewer CL IV in Spoil Backfill	L.F.	29	\$ 167.00	\$ 4,843.00
37	24-inch × 38-inch Concrete End Section	EA.	1	\$ 2,590.00	\$ 2,590.00
38	48-inch Storm Sewer Manhole w/Fabric Wrap	EA.	1	\$ 2,690.00	\$ 2,690.00
39	72-inch Storm Sewer Manhole w/Fabric Wrap	EA.	2	\$ 5,390.00	\$ 10,780.00
40	Storm 4' × 4' Box Structure	EA.	2	\$ 5,520.00	\$ 11,040.00
41	Storm Inlet w/Fabric Wrap	EA.	6	\$ 2,340.00	\$ 14,040.00
42	Televised Storm Piping Inspection	L.F.	906	\$ 4.40	\$ 3,986.40
43	Construct Roadway to Subgrade	L.S.	1	\$94,000.00	\$ 94,000.00
44	Excavation Below Subgrade	C.Y.	615	\$ 12.00	\$ 7,380.00
45	Excavation Below Subgrade (EBS) Backfill	TON	1225	\$ 11.00	\$ 13,475.00
46	Geogrid in EBS Area	S.Y.	615	\$ 5.50	\$ 3,382.50
47	Crushed Aggregate Base Course	TON	3500	\$ 15.50	\$ 54,250.00
48	30-inch Mountable Concrete Curb and Gutter	L.F.	765	\$ 38.50	\$ 29,452.50
49	30-inch Concrete Curb and Gutter	L.F.	465	\$ 27.00	\$ 12,555.00
50	30-inch Concrete Curb and Gutter (HES)	L.F.	770	\$ 60.50	\$ 46,585.00
51	4-inch Asphaltic Concrete Binder Course	TON	1050	\$ 68.00	\$ 71,400.00
52	Tack Coat	GAL	320	\$ 3.00	\$ 960.00

Total Estimated Reconstruction Project Costs - Continued

<u>Item</u>			<u>Estimated</u>	<u>Bid Unit</u>	
<u>No.</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Price</u>	<u>Bid Price</u>
53	2-inch Asphaltic Concrete Surface Course	TON	525	\$ 73.00	\$ 38,325.00
54	Concrete Pavement	S.Y.	95	\$ 95.50	\$ 9,072.50
55	Crushed Aggregate Driveway Replacement (10-Inch Depth)	TON	18	\$ 22.50	\$ 405.00
56	4-inch Asphaltic Concrete Driveway Replacement	S.F.	3390	\$ 3.00	\$ 10,170.00
57	6-inch Concrete Driveway	S.F.	3615	\$ 7.10	\$ 25,666.50
58	Topsoil, Seed, Fertilizer, Erosion Mat (non-channel)	S.Y.	2800	\$ 6.30	\$ 17,640.00
59	Topsoil, Seed, Fertilizer, Erosion Mat (channel)	S.Y.	90	\$ 6.90	\$ 621.00
60	Watering for Restoration	1,000 GAL	10	\$ 100.00	\$ 1,000.00
61	Remove, Relocate, and Replace Mailbox	EA.	7	\$ 25.00	\$ 175.00
62	Medium Riprap	TON	10	\$ 79.00	\$ 790.00
63	Trench Bridging (if ordered by Engineer)	L.F.	50	\$ 50.00	\$ 2,500.00
64	Temporary Precast Concrete Barrier (if ordered by Engineer)	L.F.	50	\$ 20.00	\$ 1,000.00
65	CN Railroad Flagmen Allowance	L.S.	1	\$10,000.00	\$ 10,000.00
66	Water Main Materials Allowance	L.S.	1	\$ 5,000.00	\$ 5,000.00
67	Sanitary Sewer Materials Allowance	L.S.	1	\$ 5,000.00	\$ 5,000.00
68	Storm Sewer Materials Allowance	L.S.	1	\$ 5,000.00	\$ 5,000.00
69	Dewatering, Disposal, and Testing of Contaminated Groundwater Allowance	L.S.	1	\$50,000.00	\$ 50,000.00
MA-1	Manhole Vacuum Test	EA.	5	\$ 500.00	\$ 2,500.00
MA-2	6-inch Water Service in Granular Backfill	L.F.	155	\$ 101.00	\$ 15,655.00
MA-3	8" x 6" Anchor Tee and Valve for 6-inch Water Service	EA.	5	\$ 4,000.00	\$ 20,000.00
Subtotal of Bid Contract					\$1,448,016.40
I1	8" C900	L.F.	1120	\$ 12.75	\$ 14,280.00
I2	8" Certilok C900	L.F.	120	\$ 27.44	\$ 3,292.80
I3	6" C900	L.F.	220	\$ 7.39	\$ 1,625.80
I4	Green Tracer Wire	L.F.	1000	\$ 0.30	\$ 300.00

Total Estimated Reconstruction Project Costs - Continued

<u>Item</u>			<u>Estimated</u>	<u>Bid Unit</u>	
<u>No.</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Price</u>	<u>Bid Price</u>
I5	Watermain Bricks	Pallet	0.5	\$ 280.40	\$ 140.20
I6	Sanitary MH Casting w/Lid	EA.	1	\$ 591.00	\$ 591.00
I7	Storm MH Casting w/ Lid	EA.	5	\$ 591.00	\$ 2,955.00
I8	8' Bury Depth Hydrant	EA.	2	\$ 2,972.00	\$ 5,944.00
I9	9' Bury Depth Hydrant	EA.	1	\$ 3,131.00	\$ 3,131.00
I10	9.5' Bury Depth Hydrant	EA.	1	\$ 3,189.00	\$ 3,189.00
I11	6.5' Bury Depth Hydrant	EA.	1	\$ 2,797.00	\$ 2,797.00
I12	Hydrant Marker	EA.	4	\$ 32.00	\$ 128.00
I13	8" Sleeve	EA.	2	\$ 106.00	\$ 212.00
I14	45-degree Elbow	EA.	2	\$ 175.80	\$ 351.60
I15	45-degree Elbow	EA.	3	\$ 86.00	\$ 258.00
I16	8" × 6" Anchor Tee	EA.	4	\$ 273.00	\$ 1,092.00
I17	6" Valve	EA.	5	\$ 700.00	\$ 3,500.00
I18	8" Valve	EA.	3	\$ 1,100.00	\$ 3,300.00
I19	6" Megalug	EA.	9	\$ 26.00	\$ 234.00
I20	6" Megalug Gasket	EA.	2	\$ 3.00	\$ 6.00
I21	8" Megalug	EA.	28	\$ 40.00	\$ 1,120.00
I22	8" Megalug Gasket	EA.	33	\$ 4.00	\$ 132.00
I23	Megalug Bolts	EA.	150	\$ 5.00	\$ 750.00
I24	2" Polyethylene	L.F.	300	\$ 2.32	\$ 696.00
I25	8" × 2" Service Saddle	EA.	7	\$ 89.00	\$ 623.00
I26	¾" Threaded Rod	L.F.	72	\$ 9.06	\$ 652.32
I27	10" × 6" Wye	EA.	5	\$ 143.00	\$ 715.00
I28	45-degree Elbow	EA.	4	\$ 17.00	\$ 68.00
I29	10" PVC Cap	EA.	1	\$ 107.58	\$ 107.58
I30	Sanitary Structure	EA.	4	\$ 1,387.44	\$ 5,549.76
I31	2" Adjusting Ring	EA.	12	\$ 20.00	\$ 240.00
I32	4" Adjusting Ring	EA.	12	\$ 36.00	\$ 432.00
I33	10" SDR 35	L.F.	840	\$ 9.37	\$ 7,870.80
I34	6" SDR 35	L.F.	112	\$ 3.33	\$ 372.96
I35	MAC Wrap	Roll	20	\$ 82.50	\$ 1,650.00
I36	2" Corporation Stop	EA.	7	\$ 276.00	\$ 1,932.00
I37	Curbsstop	EA.	6	\$ 399.00	\$ 2,394.00
I38	Curbsstop Box	EA.	6	\$ 49.00	\$ 294.00
I39	Curb Inlet	EA.	7	\$ 468.00	\$ 3,276.00
I40	Geogrid	Roll	7.5	\$ 1,457.33	\$ 10,929.98
Subtotal of Purchased Inventory for Project					\$ 87,132.80
Subtotal of Contract					\$1,535,149.20
Engineering, Administration, & Contingencies					\$ 460,544.76
Total Project Costs					\$1,995,693.96

Total Estimated Reconstruction Project Costs - Continued

Total Project Costs = \$ 1,995,693.96

Total Estimated Road Rehabilitation & Assessment Costs

<u>Item</u>		<u>Estimated</u>	<u>Bid Unit</u>		
<u>No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Price</u>		<u>Bid Price</u>
1	Mobilization	L.S.	0.24	\$88,300.00	\$ 21,192.00
2	Traffic Control	L.S.	0.24	\$22,500.00	\$ 5,400.00
6	Silt Fence	L.F.	64.8	\$ 2.00	\$ 129.60
7	Manufactured Ditch Check	EA.	1.35	\$ 100.00	\$ 135.00
9	Inlet Sediment Guard (Type D)	EA.	2.31	\$ 115.00	\$ 265.65
10	Full Depth Saw Cutting	L.F.	850	\$ 2.50	\$ 2,125.00
13	Dust Control Using Water	1,000 GAL	3.4	\$ 5.00	\$ 17.00
43	Construct Roadway to Subgrade	L.S.	1	\$94,000.00	\$ 94,000.00
44	Excavation Below Subgrade	C.Y.	615	\$ 12.00	\$ 7,380.00
45	Excavation Below Subgrade (EBS) Backfill	TON	1225	\$ 11.00	\$ 13,475.00
46	Geogrid in EBS Area	S.Y.	615	\$ 5.50	\$ 3,382.50
47	Crushed Aggregate Base Course	TON	3500	\$ 15.50	\$ 54,250.00
51	4-inch Asphaltic Concrete Binder Course	TON	1050	\$ 68.00	\$ 71,400.00
52	Tack Coat	GAL	320	\$ 3.00	\$ 960.00
53	2-inch Asphaltic Concrete Surface Course	TON	525	\$ 73.00	\$ 38,325.00
54	Concrete Pavement	S.Y.	95	\$ 95.50	\$ 9,072.50
55	Crushed Aggregate Driveway Replacement (10-Inch Depth)	TON	18	\$ 22.50	\$ 405.00
56	4-inch Asphaltic Concrete Driveway Replacement	S.F.	3390	\$ 3.00	\$ 10,170.00
57	6-inch Concrete Driveway	S.F.	3615	\$ 7.10	\$ 25,666.50
61	Remove, Relocate, and Replace Mailbox	EA.	7	\$ 25.00	\$ 175.00
Subtotal of Bid Contract					\$357,925.75
I40	Geogrid	Roll	7.5	\$ 1,457.33	\$ 10,929.98
Subtotal of Purchased Inventory for Project					\$ 10,929.98
Subtotal of Contract					\$368,855.73
Engineering, Administration, & Contingencies					\$110,656.72
Total Project Costs					\$479,512.45

Total Estimated Road Rehabilitation Costs = \$ 479,512.45

Total Acres abutting the Road = 12.68457 acres

Computation of Acreage Rate: $\frac{\$ 479,512.45}{12.68457 \text{ acres}} = \$ 37,802.81/\text{acre}$

Total Estimated Road Rehabilitation & Assessment Costs – Continued

Use \$ 37,802.81/acre as the Road Rehabilitation Acreage Rate.

Total Estimated Curb Installation & Assessment Costs

<u>Item</u>			<u>Estimated</u>	<u>Bid Unit</u>	
<u>No.</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Price</u>	<u>Bid Price</u>
1	Mobilization	L.S.	0.03	\$88,300.00	\$ 2,649.00
2	Traffic Control	L.S.	0.03	\$22,500.00	\$ 675.00
9	Inlet Sediment Guard (Type D)	EA.	2.31	\$ 115.00	\$ 265.65
48	30-inch Mountable Concrete Curb and Gutter	L.F.	382.5	\$ 38.50	\$14,726.25
49	30-inch Concrete Curb and Gutter	L.F.	232.5	\$ 27.00	\$ 6,277.50
50	30-inch Concrete Curb and Gutter (HES)	L.F.	385	\$ 60.50	\$23,292.50
58	Topsoil, Seed, Fertilizer, Erosion Mat (non-channel)	S.Y.	56	\$ 6.30	\$ 352.80
60	Watering for Restoration	1,000 GAL	0.2	\$ 100.00	\$ 20.00
Subtotal of Contract					\$48,258.70
Engineering, Administration, & Contingencies					\$14,477.61
Total Project Costs					\$62,736.31

Total Estimated Curb Installation Costs = \$ 62,736.31

Total Acres abutting the Curb = 12.68457 acres

Computation of Acreage Rate: $\frac{\$ 62,736.31}{12.68457 \text{ acres}} = \$ 4,945.88/\text{acre}$

Use \$ 4,945.88/acre as the Curb Installation Acreage Rate.

Total Estimated Sanitary Extension Costs

<u>Item</u>			<u>Estimated</u>	<u>Bid Unit</u>	
<u>No.</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Price</u>	<u>Bid Price</u>
1	Mobilization	L.S.	0.14	\$88,300.00	\$ 12,362.00
2	Traffic Control	L.S.	0.14	\$22,500.00	\$ 3,150.00
4	Dewatering/Geotextile Filter Bag Area west of CN Railroad R.O.W.	EA.	1	\$ 500.00	\$ 500.00
6	Silt Fence	L.F.	16.2	\$ 2.00	\$ 32.40
7	Manufactured Ditch Check	EA.	0.33	\$ 100.00	\$ 33.00
11	Bentonite Clay Dam	EA.	9	\$ 949.00	\$ 8,541.00
13	Dust Control Using Water	1,000 GAL	3.3	\$ 5.00	\$ 16.50
14	10-inch Sanitary Sewer in Granular Backfill	L.F.	875	\$ 129.00	\$112,875.00
15	48-inch Sanitary Sewer Manhole	EA.	4	\$ 5,050.00	\$ 20,200.00
16	6-inch Sanitary Sewer Lateral in Granular Backfill	L.F.	105	\$ 98.50	\$ 10,342.50
17	Sanitary Manhole Outside Drop	V.F.	2	\$ 4,700.00	\$ 9,400.00
18	Remove Sanitary Sewer	L.F.	15	\$ 53.50	\$ 802.50
19	Repair Sanitary Manhole	EA.	1	\$ 2,540.00	\$ 2,540.00
20	Televised Sanitary Piping Inspection	L.F.	980	\$ 3.00	\$ 2,940.00
28	Pipe Insulation	L.F.	66.6	\$ 67.50	\$ 4,495.50
58	Topsoil, Seed, Fertilizer, Erosion Mat (non-channel)	S.Y.	28	\$ 6.30	\$ 176.40
60	Watering for Restoration	1,000 GAL	0.1	\$ 100.00	\$ 10.00
63	Trench Bridging (if ordered by Engineer)	L.F.	50	\$ 50.00	\$ 2,500.00
64	Temporary Precast Concrete Barrier (if ordered by Engineer)	L.F.	50	\$ 20.00	\$ 1,000.00
67	Sanitary Sewer Materials Allowance	L.S.	1	\$ 5,000.00	\$ 5,000.00
MA-1	Manhole Vacuum Test	EA.	5	\$ 500.00	\$ 2,500.00
Subtotal of Bid Contract					\$199,416.80
I4	Green Tracer Wire	L.F.	1000	\$ 0.30	\$ 300.00
I6	Sanitary MH Casting w/Lid	EA.	1	\$ 591.00	\$ 591.00
I27	10" x 6" Wye	EA.	5	\$ 143.00	\$ 715.00
I28	45-degree Elbow	EA.	4	\$ 17.00	\$ 68.00
I29	10" PVC Cap	EA.	1	\$ 107.58	\$ 107.58
I30	Sanitary Structure	EA.	4	\$ 1,387.44	\$ 5,549.76
I31	2" Adjusting Ring	EA.	12	\$ 20.00	\$ 240.00
I32	4" Adjusting Ring	EA.	12	\$ 36.00	\$ 432.00
I33	10" SDR 35	L.F.	840	\$ 9.37	\$ 7,870.80

Total Estimated Sanitary Extension Costs – Continued

<u>Item</u>			<u>Estimated</u>	<u>Bid Unit</u>	
<u>No.</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Price</u>	<u>Bid Price</u>
I34	6" SDR 35	L.F.	112	\$ 3.33	\$ 372.96
I35	MAC Wrap	Roll	20	\$ 82.50	\$ 1,650.00
Subtotal of Purchased Inventory for Project					\$ 17,897.10
Subtotal of Contract					\$217,313.90
Engineering, Administration, & Contingencies					\$ 65,194.17
Total Project Costs					\$282,508.07

Total Estimated Sanitary Extension Costs = \$ 282,508.07

Total Estimated Sanitary Sewer Extension & Assessment Costs

<u>Item</u>			<u>Estimated</u>	<u>Bid Unit</u>	
<u>No.</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Price</u>	<u>Bid Price</u>
1	Mobilization	L.S.	0.13	\$88,300.00	\$ 11,479.00
2	Traffic Control	L.S.	0.13	\$22,500.00	\$ 2,925.00
4	Dewatering/Geotextile Filter Bag Area west of CN Railroad R.O.W.	EA.	1	\$ 500.00	\$ 500.00
6	Silt Fence	L.F.	16.2	\$ 2.00	\$ 32.40
7	Manufactured Ditch Check	EA.	0.33	\$ 100.00	\$ 33.00
11	Bentonite Clay Dam	EA.	9	\$ 949.00	\$ 8,541.00
13	Dust Control Using Water	1,000 GAL	3.3	\$ 5.00	\$ 16.50
14	10-inch Sanitary Sewer in Granular Backfill	L.F.	875	\$ 129.00	\$112,875.00
15	48-inch Sanitary Sewer Manhole	EA.	4	\$ 5,050.00	\$ 20,200.00
17	Sanitary Manhole Outside Drop	V.F.	2	\$ 4,700.00	\$ 9,400.00
18	Remove Sanitary Sewer	L.F.	15	\$ 53.50	\$ 802.50
19	Repair Sanitary Manhole	EA.	1	\$ 2,540.00	\$ 2,540.00
20	Televised Sanitary Piping Inspection	L.F.	872.2	\$ 3.00	\$ 2,616.60
63	Trench Bridging (if ordered by Engineer)	L.F.	50	\$ 50.00	\$ 2,500.00
64	Temporary Precast Concrete Barrier (if ordered by Engineer)	L.F.	50	\$ 20.00	\$ 1,000.00
67	Sanitary Sewer Materials Allowance	L.S.	0.89	\$ 5,000.00	\$ 4,450.00
MA- 1	Manhole Vacuum Test	EA.	5	\$ 500.00	\$ 2,500.00
Subtotal of Bid Contract					\$182,411.00
I4	Green Tracer Wire	L.F.	890	\$ 0.30	\$ 267.00
I6	Sanitary MH Casting w/Lid	EA.	1	\$ 591.00	\$ 591.00
I29	10" PVC Cap	EA.	1	\$ 107.58	\$ 107.58
I30	Sanitary Structure	EA.	4	\$ 1,387.44	\$ 5,549.76
I31	2" Adjusting Ring	EA.	12	\$ 20.00	\$ 240.00
I32	4" Adjusting Ring	EA.	12	\$ 36.00	\$ 432.00
I33	10" SDR 35	L.F.	840	\$ 9.37	\$ 7,870.80
I35	MAC Wrap	Roll	20	\$ 82.50	\$ 1,650.00
Subtotal of Purchased Inventory for Project					\$ 16,708.14
Subtotal of Contract					\$199,119.14
Engineering, Administration, & Contingencies					\$ 59,735.74
Total Project Costs					\$258,854.88

Total Estimated Sanitary Sewer Extension Costs = \$ 258,854.88

Total Estimated Sanitary Sewer Extension & Assessment Costs – Continued

Total Acres benefiting from the Sanitary Sewer Extension¹ = 7.6067 acres

Computation of Unit Rate: $\frac{\$ 258,854.88}{7.6067 \text{ acres}} = \$ 34,029.85/\text{acre}$

Use \$ 34,029.85/acre as the Sanitary Sewer Acreage Rate.

¹ Total Potential Acres includes half of R Frederick Trucking's parcel area receiving a deferred assessment.

Total Estimated Sewer Lateral & Assessment Costs

<u>Item</u>			<u>Estimated</u>	<u>Bid Unit</u>	
<u>No.</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Price</u>	<u>Bid Price</u>
1	Mobilization	L.S.	0.01	\$88,300.00	\$ 883.00
2	Traffic Control	L.S.	0.01	\$22,500.00	\$ 225.00
16	6-inch Sanitary Sewer Lateral in Granular Backfill	L.F.	105	\$ 98.50	\$10,342.50
20	Televised Sanitary Piping Inspection	L.F.	107.8	\$ 3.00	\$ 323.40
28	Pipe Insulation	L.F.	66.6	\$ 67.50	\$ 4,495.50
58	Topsoil, Seed, Fertilizer, Erosion Mat (non-channel)	S.Y.	28	\$ 6.30	\$ 176.40
60	Watering for Restoration	1,000 GAL	0.1	\$ 100.00	\$ 10.00
67	Sanitary Sewer Materials Allowance	L.S.	0.11	\$ 5,000.00	\$ 550.00
Subtotal of Bid Contract					\$17,005.80
I4	Green Tracer Wire	L.F.	110	\$ 0.30	\$ 33.00
I27	10" × 6" Wye	EA.	5	\$ 143.00	\$ 715.00
I28	45-degree Elbow	EA.	4	\$ 17.00	\$ 68.00
I34	6" SDR 35	L.F.	112	\$ 3.33	\$ 372.96
Subtotal of Purchased Inventory for Project					\$ 1,188.96
Subtotal of Contract					\$18,194.76
Engineering, Administration, & Contingencies					\$ 5,458.43
Total Project Costs					\$23,653.19

Total Sewer Lateral Installation Costs = \$ 23,653.19

Total Units receiving Sewer Laterals = 5 units

Computation of Unit Rate: $\frac{\$ 23,653.19}{5 \text{ units}} = \$ 4,730.64/\text{unit}$

Use \$ 4,730.64/unit as the Sewer Lateral Unit Rate.

Total Estimated Water Extension Costs

<u>Item</u>			<u>Estimated</u>	<u>Bid Unit</u>	
<u>No.</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Price</u>	<u>Bid Price</u>
1	Mobilization	L.S.	0.40	\$88,300.00	\$ 35,320.00
2	Traffic Control	L.S.	0.40	\$22,500.00	\$ 9,000.00
3	Barrier Fence	L.F.	400	\$ 4.30	\$ 1,720.00
5	Dewatering/Geotextile Filter Bag Area east of CN Railroad R.O.W.	EA.	1	\$ 500.00	\$ 500.00
6	Silt Fence	L.F.	378	\$ 2.00	\$ 756.00
7	Manufactured Ditch Check	EA.	0.33	\$ 100.00	\$ 33.00
8	Tracking Pad	S.F.	840	\$ 2.00	\$ 1,680.00
11	Bentonite Clay Dam	EA.	12	\$ 949.00	\$ 11,388.00
12	Timber Mats	S.Y.	335	\$ 25.00	\$ 8,375.00
13	Dust Control Using Water	1,000 GAL	3.3	\$ 5.00	\$ 16.50
21	8-inch Water Main in Granular Backfill	L.F.	1050	\$ 95.50	\$100,275.00
22	8-inch Water Main in Casing Pipe Jack and Bore	L.F.	130	\$ 1,440.00	\$187,200.00
23	8-inch Water Main Directional Drill	L.F.	100	\$ 135.00	\$ 13,500.00
24	6-inch Hydrant Lead in Granular Backfill	L.F.	70	\$ 91.50	\$ 6,405.00
25	Hydrant Assembly with Anchor Tee and 6-inch Valve	EA.	4	\$ 8,920.00	\$ 35,680.00
26	Remove and Replace Hydrant Assembly in Homewood Court	L.S.	1	\$12,600.00	\$ 12,600.00
27	8-inch Water Main Valve	EA.	4	\$ 2,370.00	\$ 9,480.00
28	Pipe Insulation	L.F.	113.4	\$ 67.50	\$ 7,654.50
29	2-inch Water Service in Granular Backfill	L.F.	155	\$ 72.50	\$ 11,237.50
30	2-inch Tap, Saddle, and Corporation Valve	EA.	5	\$ 255.00	\$ 1,275.00
31	2-inch Curb Valve and Curb Box	EA.	5	\$ 405.00	\$ 2,025.00
58	Topsoil, Seed, Fertilizer, Erosion Mat (non-channel)	S.Y.	672	\$ 6.30	\$ 4,233.60
60	Watering for Restoration	1,000 GAL	2.3	\$ 100.00	\$ 230.00
65	CN Railroad Flagmen Allowance	L.S.	0.67	\$10,000.00	\$ 6,700.00
66	Water Main Materials Allowance	L.S.	1	\$ 5,000.00	\$ 5,000.00
69	Dewatering, Disposal, and Testing of Contaminated Groundwater Allowance	L.S.	1	\$50,000.00	\$ 50,000.00

Total Estimated Water Extension Costs – Continued

<u>Item</u>			<u>Estimated</u>	<u>Bid Unit</u>	
<u>No.</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Price</u>	<u>Bid Price</u>
MA-2	6-inch Water Service in Granular Backfill	L.F.	155	\$ 101.00	\$ 15,655.00
MA-3	8" × 6" Anchor Tee and Valve for 6-inch Water Service	EA.	5	\$ 4,000.00	\$ 20,000.00
Subtotal of Bid Contract					\$557,939.10
I1	8" C900	L.F.	1120	\$ 12.75	\$ 14,280.00
I2	8" Certilok C900	L.F.	120	\$ 27.44	\$ 3,292.80
I3	6" C900	L.F.	220	\$ 7.39	\$ 1,625.80
I5	Watermain Bricks	Pallet	0.5	\$ 280.40	\$ 140.20
I8	8' Bury Depth Hydrant	EA.	2	\$ 2,972.00	\$ 5,944.00
I9	9' Bury Depth Hydrant	EA.	1	\$ 3,131.00	\$ 3,131.00
I10	9.5' Bury Depth Hydrant	EA.	1	\$ 3,189.00	\$ 3,189.00
I11	6.5' Bury Depth Hydrant	EA.	1	\$ 2,797.00	\$ 2,797.00
I12	Hydrant Marker	EA.	4	\$ 32.00	\$ 128.00
I13	8" Sleeve	EA.	2	\$ 106.00	\$ 212.00
I14	45-degree Elbow	EA.	2	\$ 175.80	\$ 351.60
I15	45-degree Elbow	EA.	3	\$ 86.00	\$ 258.00
I16	8" × 6" Anchor Tee	EA.	4	\$ 273.00	\$ 1,092.00
I17	6" Valve	EA.	5	\$ 700.00	\$ 3,500.00
I18	8" Valve	EA.	3	\$ 1,100.00	\$ 3,300.00
I19	6" Megalug	EA.	9	\$ 26.00	\$ 234.00
I20	6" Megalug Gasket	EA.	2	\$ 3.00	\$ 6.00
I21	8" Megalug	EA.	28	\$ 40.00	\$ 1,120.00
I22	8" Megalug Gasket	EA.	33	\$ 4.00	\$ 132.00
I23	Megalug Bolts	EA.	150	\$ 5.00	\$ 750.00
I24	2" Polyethylene	L.F.	300	\$ 2.32	\$ 696.00
I25	8" × 2" Service Saddle	EA.	7	\$ 89.00	\$ 623.00
I26	¾" Threaded Rod	L.F.	72	\$ 9.06	\$ 652.32
I36	2" Corporation Stop	EA.	7	\$ 276.00	\$ 1,932.00
I37	Curbstop	EA.	6	\$ 399.00	\$ 2,394.00
I38	Curbstop Box	EA.	6	\$ 49.00	\$ 294.00
Subtotal of Purchased Inventory for Project					\$ 52,074.72
Subtotal of Contract					\$610,013.82
Engineering, Administration, & Contingencies					\$183,004.15
Total Project Costs					\$793,017.97

Total Estimated Water Extension Costs = \$ 793,017.97

Total Estimated Water Main Extension & Assessment Costs

<u>Item</u>			<u>Estimated</u>	<u>Bid Unit</u>	
<u>No.</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Price</u>	<u>Bid Price</u>
1	Mobilization	L.S.	0.11	\$88,300.00	\$ 9,713.00
2	Traffic Control	L.S.	0.11	\$22,500.00	\$ 2,475.00
6	Silt Fence	L.F.	18.9	\$ 2.00	\$ 37.80
7	Manufactured Ditch Check	EA.	0.33	\$ 100.00	\$ 33.00
11	Bentonite Clay Dam	EA.	10	\$ 949.00	\$ 9,490.00
13	Dust Control Using Water	1,000 GAL	3.3	\$ 5.00	\$ 16.50
21	8-inch Water Main in Granular Backfill	L.F.	871.5	\$ 95.50	\$ 83,228.25
24	6-inch Hydrant Lead in Granular Backfill	L.F.	67.2	\$ 91.50	\$ 6,148.80
25	Hydrant Assembly with Anchor Tee and 6-inch Valve	EA.	3	\$ 8,920.00	\$ 26,760.00
27	8-inch Water Main Valve	EA.	2	\$ 2,370.00	\$ 4,740.00
28	Pipe Insulation	L.F.	7.94	\$ 67.50	\$ 535.95
58	Topsoil, Seed, Fertilizer, Erosion Mat (non-channel)	S.Y.	33.6	\$ 6.30	\$ 211.68
60	Watering for Restoration	1,000 GAL	0.12	\$ 100.00	\$ 12.00
66	Water Main Materials Allowance	L.S.	0.56	\$ 5,000.00	\$ 2,800.00
Subtotal of Bid Contract					\$146,201.98
I1	8" C900	L.F.	828.8	\$ 12.75	\$ 10,567.20
I3	6" C900	L.F.	66	\$ 7.39	\$ 487.74
I5	Watermain Bricks	Pallet	0.2	\$ 280.40	\$ 56.08
I8	8' Bury Depth Hydrant	EA.	2	\$ 2,972.00	\$ 5,944.00
I9	9' Bury Depth Hydrant	EA.	1	\$ 3,131.00	\$ 3,131.00
I10	9.5' Bury Depth Hydrant	EA.	1	\$ 3,189.00	\$ 3,189.00
I12	Hydrant Marker	EA.	3	\$ 32.00	\$ 96.00
I13	8" Sleeve	EA.	2	\$ 106.00	\$ 212.00
I14	45-degree Elbow	EA.	0.58	\$ 175.80	\$ 101.96
I15	45-degree Elbow	EA.	0.87	\$ 86.00	\$ 74.82
I17	6" Valve	EA.	1.65	\$ 700.00	\$ 1,155.00
I18	8" Valve	EA.	1.5	\$ 1,100.00	\$ 1,650.00
I19	6" Megalug	EA.	3.51	\$ 26.00	\$ 91.26
I20	6" Megalug Gasket	EA.	0.78	\$ 3.00	\$ 2.34
I21	8" Megalug	EA.	9.8	\$ 40.00	\$ 392.00
I22	8" Megalug Gasket	EA.	10.56	\$ 4.00	\$ 42.24
I23	Megalug Bolts	EA.	58.5	\$ 5.00	\$ 292.50

Total Estimated Water Main Extension & Assessment Costs

<u>Item</u>		<u>Estimated</u>	<u>Bid Unit</u>	
<u>No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Price</u>	<u>Bid Price</u>
126	¾" Threaded Rod	L.F.	54	\$ 9.06 \$ 489.24
Subtotal of Purchased Inventory for Project				\$ 27,974.38
Subtotal of Contract				\$174,176.36
Engineering, Administration, & Contingencies				\$ 52,252.91
Total Project Costs				\$226,429.27

Total Estimated Water Main Extension Costs = \$ 226,429.27

Total Potential Acres benefiting from Water Main Extension¹ = 7.6067 acres

Computation of Acreage Rate: $\frac{\$ 226,439.27}{7.6067 \text{ acres}} = \$ 29,767.08/\text{acre}$

Use \$ 29,767.08/acre as the Water Main Acreage Rate.

¹ Total Potential Acres includes half of R Frederick Trucking's parcel area receiving a deferred assessment.

Total Estimated 2-inch Water Service & Assessment Costs

<u>Item</u>			<u>Estimated</u>	<u>Bid Unit</u>	
<u>No.</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Price</u>	<u>Bid Price</u>
1	Mobilization	L.S.	0.02	\$88,300.00	\$ 1,766.00
2	Traffic Control	L.S.	0.02	\$22,500.00	\$ 450.00
28	Pipe Insulation	L.F.	52.72	\$ 67.50	\$ 3,558.60
29	2-inch Water Service in Granular Backfill	L.F.	155	\$ 72.50	\$11,237.50
30	2-inch Tap, Saddle, and Corporation Valve	EA.	5	\$ 255.00	\$ 1,275.00
31	2-inch Curb Valve and Curb Box	EA.	5	\$ 405.00	\$ 2,025.00
58	Topsoil, Seed, Fertilizer, Erosion Mat (non-channel)	S.Y.	13.44	\$ 6.30	\$ 84.67
60	Watering for Restoration	1,000 GAL	0.04	\$ 100.00	\$ 4.00
66	Water Main Materials Allowance	L.S.	0.09	\$ 5,000.00	\$ 450.00
Subtotal of Bid Contract					\$20,850.77
I24	2" Polyethylene	L.F.	300	\$ 2.32	\$ 696.00
I25	8" × 2" Service Saddle	EA.	7	\$ 89.00	\$ 623.00
I36	2" Corporation Stop	EA.	7	\$ 276.00	\$ 1,932.00
I37	Curbstop	EA.	6	\$ 399.00	\$ 2,394.00
I38	Curbstop Box	EA.	6	\$ 49.00	\$ 294.00
Subtotal of Purchased Inventory for Project					\$ 5,939.00
Subtotal of Contract					\$26,789.77
Engineering, Administration, & Contingencies					\$ 8,036.93
Total Project Costs					\$34,826.70

Total Estimated 2-inch Water Service Costs = \$ 34,826.70

Total Potential Units receiving 2-inch Water Service = 5 units

Computation of Unit Rate: $\frac{\$ 34,826.70}{5 \text{ units}} = \$ 6,965.34/\text{unit}$

Use \$ 6,965.34/unit as the 2-inch Water Service Unit Rate.

Total Estimated 6-inch Water Service & Assessment Costs

<u>Item No.</u>	<u>Description</u>	<u>Unit</u>	<u>Estimated Quantity</u>	<u>Bid Unit Price</u>	<u>Bid Price</u>
1	Mobilization	L.S.	0.03	\$88,300.00	\$ 2,649.00
2	Traffic Control	L.S.	0.03	\$22,500.00	\$ 675.00
28	Pipe Insulation	L.F.	52.74	\$ 67.50	\$ 3,559.95
58	Topsoil, Seed, Fertilizer, Erosion Mat (non-channel)	S.Y.	13.44	\$ 6.30	\$ 84.67
60	Watering for Restoration	1,000 GAL	0.05	\$ 100.00	\$ 5.00
66	Water Main Materials Allowance	L.S.	0.1	\$ 5,000.00	\$ 500.00
MA-2	6-inch Water Service in Granular Backfill	L.F.	155	\$ 101.00	\$15,655.00
MA-3	8" × 6" Anchor Tee and Valve for 6-inch Water Service	EA.	5	\$ 4,000.00	\$20,000.00
Subtotal of Bid Contract					\$43,128.62
I3	6" C900	L.F.	151.8	\$ 7.39	\$ 1,121.80
I5	Watermain Bricks	Pallet	0.19	\$ 280.40	\$ 53.28
I16	8" × 6" Anchor Tee	EA.	4	\$ 273.00	\$ 1,092.00
I17	6" Valve	EA.	2.8	\$ 700.00	\$ 1,960.00
I19	6" Megalug	EA.	3.96	\$ 26.00	\$ 102.96
I20	6" Megalug Gasket	EA.	0.88	\$ 3.00	\$ 2.64
I21	8" Megalug	EA.	2.52	\$ 40.00	\$ 100.80
I22	8" Megalug Gasket	EA.	3.3	\$ 4.00	\$ 13.20
I23	Megalug Bolts	EA.	42	\$ 5.00	\$ 210.00
Subtotal of Purchased Inventory for Project					\$ 4,656.68
Subtotal of Contract					\$47,785.30
Engineering, Administration, & Contingencies					\$14,335.59
Total Project Costs					\$62,120.89

Total Estimated 6-inch Water Service Costs = \$ 62,120.89

Total Potential Units receiving 6-inch Water Service = 5 units

Computation of Unit Rate: $\frac{\$ 62,120.89}{5 \text{ units}} = \$ 12,424.18/\text{unit}$

Use \$ 12,424.18/unit as the 6-inch Water Service Unit Rate.

Total Estimated Water Utility Costs

<u>Item</u>			<u>Estimated</u>	<u>Bid Unit</u>	
<u>No.</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Price</u>	<u>Bid Price</u>
1	Mobilization	L.S.	0.24	\$88,300.00	\$ 21,192.00
2	Traffic Control	L.S.	0.24	\$22,500.00	\$ 5,400.00
3	Barrier Fence	L.F.	400	\$ 4.30	\$ 1,720.00
5	Dewatering/Geotextile Filter Bag Area east of CN Railroad R.O.W.	EA.	1	\$ 500.00	\$ 500.00
6	Silt Fence	L.F.	359.1	\$ 2.00	\$ 718.20
8	Tracking Pad	S.F.	840	\$ 2.00	\$ 1,680.00
11	Bentonite Clay Dam	EA.	2	\$ 949.00	\$ 1,898.00
12	Timber Mats	S.Y.	335	\$ 25.00	\$ 8,375.00
21	8-inch Water Main in Granular Backfill	L.F.	178.5	\$ 95.50	\$ 17,046.75
22	8-inch Water Main in Casing Pipe Jack and Bore	L.F.	130	\$ 1,440.00	\$187,200.00
23	8-inch Water Main Directional Drill	L.F.	100	\$ 135.00	\$ 13,500.00
24	6-inch Hydrant Lead in Granular Backfill	L.F.	2.8	\$ 91.50	\$ 256.20
25	Hydrant Assembly with Anchor Tee and 6-inch Valve	EA.	1	\$ 8,920.00	\$ 8,920.00
26	Remove and Replace Hydrant Assembly in Homewood Court	L.S.	1	\$12,600.00	\$ 12,600.00
27	8-inch Water Main Valve	EA.	2	\$ 2,370.00	\$ 4,740.00
58	Topsoil, Seed, Fertilizer, Erosion Mat (non-channel)	S.Y.	611.52	\$ 6.30	\$ 3,852.58
60	Watering for Restoration	1,000 GAL	2.09	\$ 100.00	\$ 209.00
65	CN Railroad Flagmen Allowance	L.S.	0.67	\$10,000.00	\$ 6,700.00
66	Water Main Materials Allowance	L.S.	0.25	\$ 5,000.00	\$ 1,250.00
69	Dewatering, Disposal, and Testing of Contaminated Groundwater Allowance	L.S.	1	\$50,000.00	\$ 50,000.00
Subtotal of Bid Contract					\$347,757.73
I1	8" C900	L.F.	291.2	\$ 12.75	\$ 3,712.80
I2	8" Certilok C900	L.F.	120	\$ 27.44	\$ 3,292.80
I3	6" C900	L.F.	2.2	\$ 7.39	\$ 16.26
I5	Watermain Bricks	Pallet	0.11	\$ 280.40	\$ 30.84
I11	6.5' Bury Depth Hydrant	EA.	1	\$ 2,797.00	\$ 2,797.00
I12	Hydrant Marker	EA.	1	\$ 32.00	\$ 32.00
I14	45-degree Elbow	EA.	1.42	\$ 175.80	\$ 249.64
I15	45-degree Elbow	EA.	2.13	\$ 86.00	\$ 183.18
I17	6" Valve	EA.	0.55	\$ 700.00	\$ 385.00

Total Estimated Water Utility Costs – Continued

<u>Item</u>			<u>Estimated</u>	<u>Bid Unit</u>	
<u>No.</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Price</u>	<u>Bid Price</u>
I18	8" Valve	EA.	1.5	\$ 1,100.00	\$ 1,650.00
I19	6" Megalug	EA.	1.53	\$ 26.00	\$ 39.78
I20	6" Megalug Gasket	EA.	0.34	\$ 3.00	\$ 1.02
I21	8" Megalug	EA.	15.68	\$ 40.00	\$ 627.20
I22	8" Megalug Gasket	EA.	19.14	\$ 4.00	\$ 76.56
I23	Megalug Bolts	EA.	49.5	\$ 5.00	\$ 247.50
I26	¾" Threaded Rod	L.F.	18	\$ 9.06	\$ 163.08
Subtotal of Purchased Inventory for Project					\$ 13,504.66
Subtotal of Contract					\$361,262.39
Engineering, Administration, & Contingencies					\$108,378.72
Total Project Costs					\$469,641.11

Total Estimated Water Utility Costs = \$ 469,641.11

Total Estimated Storm Water Utility Costs

<u>Item</u>			<u>Estimated</u>	<u>Bid Unit</u>	
<u>No.</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Price</u>	<u>Bid Price</u>
1	Mobilization	L.S.	0.19	\$88,300.00	\$ 16,777.00
2	Traffic Control	L.S.	0.19	\$ 22,500.00	\$ 4,275.00
6	Silt Fence	L.F.	81	\$ 2.00	\$ 162.00
7	Manufactured Ditch Check	EA.	0.99	\$ 100.00	\$ 99.00
9	Inlet Sediment Guard (Type D)	EA.	2.38	\$ 115.00	\$ 273.70
10	Full Depth Saw Cutting	L.F.	850	\$ 2.50	\$ 2,125.00
32	12-inch Storm Sewer CL IV in granular backfill	L.F.	17	\$ 90.50	\$ 1,538.50
33	12-inch Storm Sewer CL IV in Concrete Encasement	L.F.	95	\$ 147.00	\$ 13,965.00
34	14-inch × 23-inch HERCP Storm Sewer CL IV in Granular Backfill	L.F.	443	\$ 137.00	\$ 60,691.00
35	19-inch × 23-inch HERCP Storm Sewer CL IV in Concrete Encasement	L.F.	322	\$ 208.00	\$ 66,976.00
36	24-inch × 38-inch HERCP Storm Sewer CL IV in Spoil Backfill	L.F.	29	\$ 167.00	\$ 4,843.00
37	24-inch × 38-inch Concrete End Section	EA.	1	\$ 2,590.00	\$ 2,590.00
38	48-inch Storm Sewer Manhole w/Fabric Wrap	EA.	1	\$ 2,690.00	\$ 2,690.00
39	72-inch Storm Sewer Manhole w/Fabric Wrap	EA.	2	\$ 5,390.00	\$ 10,780.00
40	Storm 4' × 4' Box Structure	EA.	2	\$ 5,520.00	\$ 11,040.00
41	Storm Inlet w/Fabric Wrap	EA.	6	\$ 2,340.00	\$ 14,040.00
42	Televised Storm Piping Inspection	L.F.	906	\$ 4.40	\$ 3,986.40
48	30-inch Mountable Concrete Curb and Gutter	L.F.	382.5	\$ 38.50	\$ 14,726.25
49	30-inch Concrete Curb and Gutter	L.F.	232.5	\$ 27.00	\$ 6,277.50
50	30-inch Concrete Curb and Gutter (HES)	L.F.	385	\$ 60.50	\$ 23,292.50
58	Topsoil, Seed, Fertilizer, Erosion Mat (non-channel)	S.Y.	2044	\$ 6.30	\$ 12,877.20
59	Topsoil, Seed, Fertilizer, Erosion Mat (channel)	S.Y.	90	\$ 6.90	\$ 621.00
60	Watering for Restoration	1,000 GAL	7.4	\$ 100.00	\$ 740.00
62	Medium Riprap	TON	10	\$ 79.00	\$ 790.00
65	CN Railroad Flagmen Allowance	L.S.	0.33	\$ 10,000.00	\$ 3,300.00
68	Storm Sewer Materials Allowance	L.S.	1	\$ 5,000.00	\$ 5,000.00
Subtotal of Bid Contract					\$284,476.05

Estimated Storm Water Utility Costs – Continued

<u>Item</u>			<u>Estimated</u>	<u>Bid Unit</u>	
<u>No.</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Price</u>	<u>Bid Price</u>
17	Storm MH Casting w/ Lid	EA.	5	\$ 591.00	\$ 2,955.00
139	Curb Inlet	EA.	7	\$ 468.00	\$ 3,276.00
Subtotal of Purchased Inventory for Project					\$ 6,231.00
Subtotal of Contract					\$290,707.05
Engineering, Administration, & Contingencies					\$ 87,212.11
Total Project Costs					\$377,919.16

Total Estimated Storm Water Utility Costs = \$ 377,919.16

January 13, 2021

All that part of the SW $\frac{1}{4}$ of Section 13, Township 7 North, Range 19 East, in the City of Pewaukee, Waukesha County, Wisconsin. Bound and Described as Follows:

Commencing at the SW corner of the SW $\frac{1}{4}$ of Section 13, T7N, R19E Thence Due North Along the West Line of Said SW $\frac{1}{4}$, 254.48 Feet, Thence S84°29'39"E, 50.23 Feet to a point on the East R/W Line of Redford Blvd also being the SW Corner of Parcel "A" of Certified Survey Map No. 1242 also being the point of beginning of area to be Described; Thence continuing S84°29'39"E Along the South line of Said CSM 1242, 951.83 Feet to the SE corner of Joseph Road Condominiums, also being a Point on the West R/W line of the Canadian National Railroad; Thence N5°24'08"E Along said Railroad R/W 649.33 Feet to the NE corner of Tax Key Parcel #PWC0915990002; Thence N86°04'22"W Along the North Line of said Tax Key Parcel #PWC0915990002, 982.83 Feet, to the NW corner of said Tax Key Parcel Also Being a Point on the East R/W Line of Redford Blvd.; Thence S2°34'47"W Along Said R/W Line 623.07 Feet to the Point of Beginning.

Dave Geis
Senior Engineering Technician
City of Pewaukee

April 13, 2021

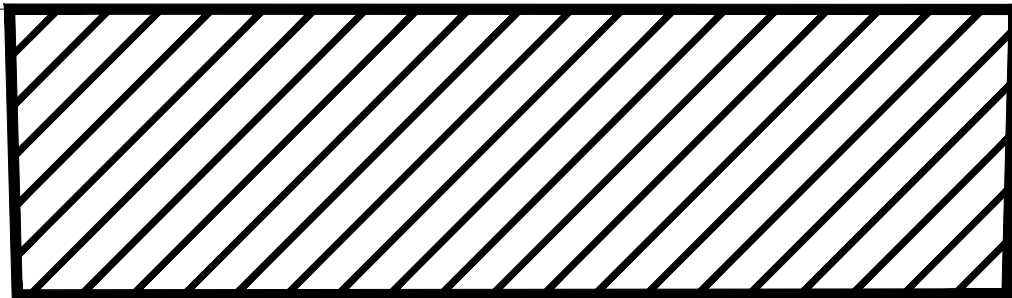
All that part of the SW $\frac{1}{4}$ of Section 13, Township 7 North, Range 19 East, in the City of Pewaukee, Waukesha County, Wisconsin. Bound and Described as Follows:

Commencing at the SW corner of the SW $\frac{1}{4}$ of Section 13, T7N, R19E Thence Due North Along the West Line of Said SW $\frac{1}{4}$, 254.48 Feet, Thence S84°29'39"E, 345.23 Feet to the SW Corner of Parcel "B" Certified Survey Map No. 1242 also being the Point of Beginning of Area to be Described; Continuing S84°29'39"E Along the South Line of Said Certified Survey Map, 656.82 Feet to the SE Corner of Joseph Road Condominiums also being a Point on the West R/W line of the Canadian National Railroad; Thence N5°24'08"E Along said Railroad R/W 649.33 Feet to the NE corner of Tax Key Parcel #PWC0915990002; Thence N86°04'22"W Along the North Line of said Tax Key Parcel #PWC0915990002, 982.83 Feet, to the NW corner of said Tax Key Parcel Also Being a Point on the East R/W Line of Redford Blvd.; Thence S2°34'47"W Along Said R/W Line, 344.2 Feet, to the NW Corner of Parcel "A" of CSM 1242 also being the South R/W Line of Joseph Road; Thence S86°04'22"E Along Said South R/W Line, 301.44 Feet, to the NW Corner of Parcel "B" Certified Survey Map No. 1242; Thence S3°55'38"W Along the West Line of Said CSM, 286.60 Feet to the Point of Beginning.

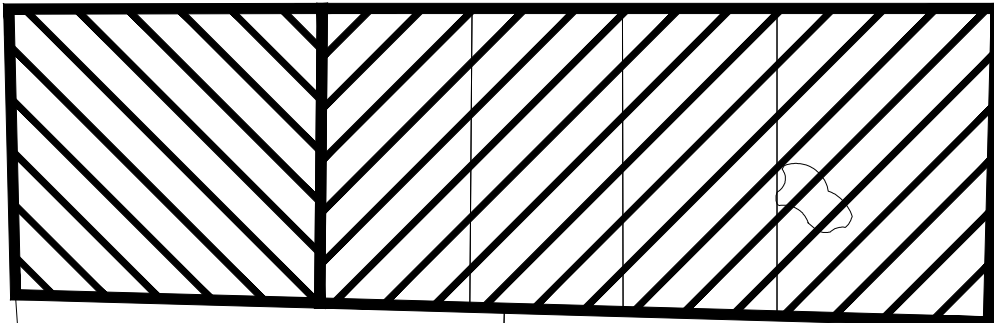
Dave Geis
Senior Engineering Technician
City of Pewaukee

JOSEPH ROAD AREA 2021
RD-21-57553 & SS-21-12831 & WU-21-12831
SANITARY SEWER, WATER MAIN, AND ROAD ASSESSMENT
CITY OF PEWAUKEE
WAUKESHA COUNTY, WISCONSIN

REDFORD BLVD. C.T.H. "F"

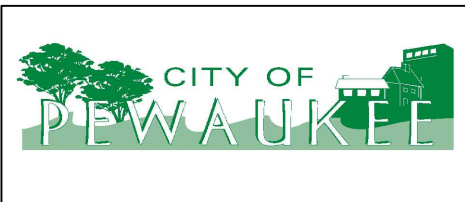


JOSEPH RD.



WISCONSIN CENTRAL LTD. RR.

HOMWOOD CT.



LEGEND

-  CURB & ROAD ASSESSMENT
-  SEWER, WATER, CURB, & ROAD ASSESSMENT



SCHEDULE C
 PRELIMINARY ASSESSMENT ROLL
 JOSEPH ROAD 2021 RECONSTRUCTION, WATER MAIN EXTENSION, SANITARY SEWER EXTENSION

No.	Owner's Name & Address	Tax Key No.	Description	Quantity	Unit	Cost/Unit	Cost	Total Assessment	
1	OHM REDFORD LLC W229N2494 COUNTY ROAD F WAUKESHA WI 53186-1104	PWC 0915990001	Curb Construction	1.9556	Acre	\$ 4,945.88	\$ 9,672.16	\$ 83,599.34	
			Road Reconstruction	1.9556	Acre	\$ 37,802.81	\$ 73,927.18		
2	R FREDRICK TRUCKING INC W229N2500 COUNTY ROAD F WAUKESHA WI 53186-1011	PWC 0915990002	Curb Construction	6.24447	Acre	\$ 4,945.88	\$ 30,884.40	\$ 266,942.91	
			Road Reconstruction	6.24447	Acre	\$ 37,802.81	\$ 236,058.51		
			Water Assessment-Deferred	3.12224	Acre	\$ 29,767.08	\$ 92,939.97		\$ 199,189.33
			Sewer Assessment-Deferred	3.12224	Acre	\$ 34,029.85	\$ 106,249.36		
3	DBR SERVICES LLC 13885 W CAPITOL DRIVE BROOKFIELD WI 53005	PWC 0915990003	Curb Construction	0.9835	Acre	\$ 4,945.88	\$ 4,864.27	\$ 116,483.59	
			Road Reconstruction	0.9835	Acre	\$ 37,802.81	\$ 37,179.06		
			Water Assessment	0.9835	Acre	\$ 29,767.08	\$ 29,275.92		
			Water Service Assessment	1	Unit	\$ 6,965.34	\$ 6,965.34		
			Sewer Assessment	0.9835	Acre	\$ 34,029.85	\$ 33,468.36		
			Sewer Lateral Assessment	1	Unit	\$ 4,730.64	\$ 4,730.64		
4	JOSEPH RD LLC 6156 DARLIN DRIVE DANE WI 53529-9638	PWC 0915990004	Curb Construction	1.0026	Acre	\$ 4,945.88	\$ 4,958.74	\$ 118,518.62	
			Road Reconstruction	1.0026	Acre	\$ 37,802.81	\$ 37,901.10		
			Water Assessment	1.0026	Acre	\$ 29,767.08	\$ 29,844.47		
			Water Service Assessment	1	Unit	\$ 6,965.34	\$ 6,965.34		
			Sewer Assessment	1.0026	Acre	\$ 34,029.85	\$ 34,118.33		
			Sewer Lateral Assessment	1	Unit	\$ 4,730.64	\$ 4,730.64		
5	RAYMOND M GALINSKY N17W22602 WATERTOWN ROAD WAUKESHA WI 53186	PWC 0915990006	Curb Construction	1.0318	Acre	\$ 4,945.88	\$ 5,103.16	\$ 121,629.75	
			Road Reconstruction	1.0318	Acre	\$ 37,802.81	\$ 39,004.94		
			Water Assessment	1.0318	Acre	\$ 29,767.08	\$ 30,713.67		
			Water Service Assessment	1	Unit	\$ 6,965.34	\$ 6,965.34		
			Sewer Assessment	1.0318	Acre	\$ 34,029.85	\$ 35,112.00		
			Sewer Lateral Assessment	1	Unit	\$ 4,730.64	\$ 4,730.64		
6	TIMOTHY M HUBER W5525 SUN ROAD JUNEAU WI 53039	PWC 0915990007	Curb Construction	0.7333	Acre	\$ 4,945.88	\$ 3,626.81	\$ 89,825.88	
			Road Reconstruction	0.7333	Acre	\$ 37,802.81	\$ 27,720.80		
			Water Assessment	0.7333	Acre	\$ 29,767.08	\$ 21,828.20		
			Water Service Assessment	1	Unit	\$ 6,965.34	\$ 6,965.34		
			Sewer Assessment	0.7333	Acre	\$ 34,029.85	\$ 24,954.09		
			Sewer Lateral Assessment	1	Unit	\$ 4,730.64	\$ 4,730.64		

JOSEPH ROAD 2021 RECONSTRUCTION, WATER MAIN EXTENSION, SANITARY SEWER EXTENSION

No.	Owner's Name & Address	Tax Key No.	Description	Quantity	Unit	Cost/Unit	Cost	Total Assessment
7	TIMOTHY HUBER AND WENDY HUBER W5525 SUN ROAD JUNEAU WI 53039	PWC 0915990008	Curb Construction	0.7333	Acre	\$ 4,945.88	\$ 3,626.81	\$ 89,825.88
			Road Reconstruction	0.7333	Acre	\$ 37,802.81	\$ 27,720.80	
			Water Assessment	0.7333	Acre	\$ 29,767.08	\$ 21,828.20	
			Water Service Assessment	1	Unit	\$ 6,965.34	\$ 6,965.34	
			Sewer Assessment	0.7333	Acre	\$ 34,029.85	\$ 24,954.09	
			Sewer Lateral Assessment	1	Unit	\$ 4,730.64	\$ 4,730.64	
			TOTAL CONTRIBUTION IN AID OF CURB CONSTRUCTION				\$	62,736.35
			TOTAL CONTRIBUTION IN AID OF ROAD RECONSTRUCTION				\$	479,512.39
			TOTAL CONTRIBUTION IN AID OF WATER MAIN CONSTRUCTION				\$	133,490.46
			TOTAL CONTRIBUTION IN AID OF WATER SERVICE CONSTRUCTION				\$	34,826.70
			TOTAL CONTRIBUTION IN AID OF SANITARY SEWER CONSTRUCTION				\$	152,606.87
			TOTAL CONTRIBUTION IN AID OF SEWER LATERAL CONSTRUCTION				\$	23,653.20
			TOTAL CONTRIBUTION IN AID OF WATER MAIN CONSTRUCTION - Deferred				\$	92,939.97
			TOTAL CONTRIBUTION IN AID OF SANITARY SEWER CONSTRUCTION - Deferred				\$	106,249.36

The properties against which contributions in aid of construction of proposed benefits and improvements constitute an exercise of Police Powers.