

Meadowbrook Road
Northview Road to Rolling Ridge Drive
City of Waukesha
Project Cost Estimate - July 29, 2016

Item	Description	Quantity	Unit	Unit Price	Total
ROADWAY ITEMS					
201.0105	Clearing	8	STA	\$ 385.00	\$ 3,080.00
201.0120	Clearing	10	ID	\$ 26.00	\$ 260.00
201.0205	Grubbing	8	STA	\$ 238.00	\$ 1,904.00
201.0220	Grubbing	10	ID	\$ 27.00	\$ 270.00
204.0100	Removing Pavement	22	SY	\$ 12.50	\$ 275.00
204.0110	Removing Asphaltic Surface	2,425	SY	\$ 3.25	\$ 7,881.25
204.0150	Removing Curb & Gutter	2,835	LF	\$ 3.65	\$ 10,347.75
204.0155	Removing Concrete Sidewalk	802	SY	\$ 5.65	\$ 4,531.30
204.0210	Removing Manholes	3	EA	\$ 375.00	\$ 1,125.00
204.0220	Removing Inlets	14	EA	\$ 275.00	\$ 3,850.00
204.0245.0001	Removing Storm Sewer 12-Inch	764	LF	\$ 10.00	\$ 7,640.00
204.0245.0003	Removing Storm Sewer 18-Inch	25	LF	\$ 12.00	\$ 300.00
204.0245.0005	Removing Storm Sewer 24-Inch	44	LF	\$ 14.00	\$ 616.00
204.0245.0008	Removing Storm Sewer 42-Inch	337	LF	\$ 18.00	\$ 6,066.00
204.0245.0009	Removing Storm Sewer 48-Inch	174	LF	\$ 20.00	\$ 3,480.00
205.0100	Excavation Common	36,001	CY	\$ 12.00	\$ 432,012.00
305.0120	Base Aggregate Dense 1-1/4 Inch	12,597	TON	\$ 12.30	\$ 154,943.10
312.0110	Select Crushed Material	25,366	TON	\$ 11.00	\$ 279,026.00
415.0080	Concrete Pavement 8-Inch	21,905	SY	\$ 29.00	\$ 635,245.00
416.0170	Concrete Driveway 7-Inch	54	SY	\$ 50.00	\$ 2,700.00
416.0610	Drilled Tie Bars	54	EA	\$ 8.90	\$ 480.60
455.0605	Tack Coat	213	GAL	\$ 5.00	\$ 1,065.00
460.2000	Incentive Density HMA Pavement	534	DOL	\$ 1.00	\$ 534.00
460.5223	HMA Pavement 3 LT 58-28 S	543	TON	\$ 77.00	\$ 41,811.00
460.5224	HMA Pavement 4 LT 58-28 S	292	TON	\$ 77.00	\$ 22,484.00
465.0120	Asphaltic Surface Driveways and Field Entrances	11	TON	\$ 207.00	\$ 2,277.00
465.0125	Asphaltic Surface Temporary	114	TON	\$ 93.50	\$ 10,659.00
601.0409	Concrete Curb & Gutter 30-Inch Type A	10,468	LF	\$ 11.60	\$ 121,428.80
601.0411	Concrete Curb & Gutter 30-Inch Type D	961	LF	\$ 16.30	\$ 15,664.30
602.0410	Concrete Sidewalk 5-Inch	7,888	SF	\$ 3.75	\$ 29,580.00
602.0505	Curb Ramp Detectable Warning Field Yellow	280	SF	\$ 32.65	\$ 9,142.00
620.0300	Concrete Median Sloped Nose Type 1	296	SF	\$ 7.40	\$ 2,190.40
623.0200	Dust Control Surface Treatment	28,500	SY	\$ 0.05	\$ 1,425.00
624.0100	Water	169	MGAL	\$ 34.50	\$ 5,830.50
625.0500	Salvaged Topsoil	14,255	SY	\$ 1.65	\$ 23,520.75
628.1504	Silt Fence	3,819	LF	\$ 1.80	\$ 6,874.20
628.1520	Silt Fence Maintenance	3,819	LF	\$ 0.10	\$ 381.90
628.1905	Mobilizations Erosion Control	2	EA	\$ 150.00	\$ 300.00
628.1910	Mobilizations Emergency Erosion Control	2	EA	\$ 200.00	\$ 400.00
628.7005	Inlet Protection Type A	58	EA	\$ 80.00	\$ 4,640.00
628.7015	Inlet Protection Type C	98	EA	\$ 50.00	\$ 4,900.00
628.7555	Culvert Pipe Checks	1	EA	\$ 80.00	\$ 80.00
628.7560	Tracking Pads	2	EA	\$ 1,675.00	\$ 3,350.00
629.0210	Fertilizer Type B	9	CWT	\$ 68.00	\$ 612.00
631.0300	Sod Water	320.1	MGAL	\$ 17.25	\$ 5,521.73
631.1000	Sod Lawn	12,455	SY	\$ 3.25	\$ 40,478.75
634.0616	Posts Wood 4x6-IN 16 FT	18	EA	\$ 60.00	\$ 1,080.00
634.0618	Posts Wood 4x6-IN 18 FT	7	EA	\$ 70.00	\$ 490.00
637.2210	Signs Type II Reflective H	161.42	SF	\$ 17.00	\$ 2,744.14
637.2215	Signs Type II Reflective H Folding	31.08	SF	\$ 25.00	\$ 777.00
637.2230	Signs Type II Reflective F	70.25	SF	\$ 19.00	\$ 1,334.75
638.2102	Moving Signs Type II	9.00	EA	\$ 20.00	\$ 180.00
638.2602	Removing Signs Type II	58	EA	\$ 16.50	\$ 957.00
638.3000	Removing Small Sign Supports	38	EA	\$ 19.00	\$ 722.00
643.0300	Traffic Control Drums	3,864	Days	\$ 0.50	\$ 1,932.00
643.0420	Traffic Control Barricades Type III	434	Days	\$ 1.30	\$ 564.20
643.0715	Traffic Control Warning Lights Type C	854	Days	\$ 0.50	\$ 427.00
643.0900	Traffic Control Signs	574	Days	\$ 1.00	\$ 574.00
646.0106	Pavement Marking Epoxy 4-Inch	5,246	LF	\$ 1.20	\$ 6,295.20
646.0126	Pavement Marking Epoxy 8-Inch	335	LF	\$ 1.35	\$ 452.25
646.0600	Removing Pavement Parkings	206	LF	\$ 1.35	\$ 278.10
646.0841.S	Pavement Marking Grooved Wet Reflective Contrast Tape 4-Inch	1,643	LF	\$ 8.20	\$ 13,472.60
646.0843.S	Pavement Marking Grooved Wet Reflective Contrast Tape 8-Inch	1,793	LF	\$ 9.40	\$ 16,854.20
647.0166	Pavement Marking Arrows Epoxy Type 2	4	EA	\$ 187.00	\$ 748.00
647.0356	Pavement Marking Words Epoxy	2	EA	\$ 192.00	\$ 384.00

647.0456	Pavement Marking Curb Epoxy	177	LF	\$ 7.25	\$ 1,283.25
647.0566	Pavement Marking Stop Line Epoxy 18-Inch	223	LF	\$ 9.70	\$ 2,163.10
647.0606	Pavement Marking Island Nose Epoxy	6	EA	\$ 107.00	\$ 642.00
647.0766	Pavement Marking Crosswalk Epoxy 6-Inch	1,602	LF	\$ 6.00	\$ 9,612.00
647.0955	Removing Pavement Markings Arrows	6	EA	\$ 87.00	\$ 522.00
647.0965	Removing Pavement Markings Words	5	EA	\$ 60.00	\$ 300.00
649.0400	Temporary Pavement Marking Removable Tape	7,206	LF	\$ 1.00	\$ 7,206.00
654.0101	Concrete Bases Type 1	1	EA	\$ 700.00	\$ 700.00
690.0150	Sawing Asphalt	1,018	LF	\$ 0.90	\$ 916.20
690.0250	Sawing Concrete	148	LF	\$ 2.20	\$ 325.60
SPV.XXXX	Moving Flasher Assembly	1	EA	\$ 2,000.00	\$ 2,000.00
SPV.XXXX	Adjusting Water Valve Boxes	13	EA	\$ 500.00	\$ 6,500.00
SPV.XXXX	Adjusting Hydrant and Valve	3	EA	\$ 1,000.00	\$ 3,000.00
SPV.XXXX	Adjusting Sanitary Manholes	12	EA	\$ 750.00	\$ 9,000.00
SUBTOTAL ROADWAY ITEMS					\$ 2,005,619.92
DRAINAGE ITEMS					
DIVISION A - STORM SEWER					
1	12-inch Reinforced Concrete Pipe Storm Sewer Class V	595	LF	\$ 80.00	\$ 47,560.00
2	15-inch Reinforced Concrete Pipe Storm Sewer, Class V	260	LF	\$ 90.00	\$ 23,400.00
3	18-inch Reinforced Concrete Pipe Storm Sewer, Class III	144	LF	\$ 100.00	\$ 14,400.00
4	21-inch Reinforced Concrete Pipe Storm Sewer, Class V	56	LF	\$ 120.00	\$ 6,720.00
5	24-inch Reinforced Concrete Pipe Storm Sewer, Class III	997	LF	\$ 135.00	\$ 134,595.00
6	42-inch Reinforced Concrete Pipe Storm Sewer, Class V	2,282	LF	\$ 225.00	\$ 513,450.00
7	48-inch Reinforced Concrete Pipe Storm Sewer, Class III	154	LF	\$ 165.00	\$ 25,410.00
8	4-foot by 8-foot Reinforced Concrete Storm Sewer Box Culvert	212	LF	\$ 925.00	\$ 196,100.00
9	4-foot by 12-foot Reinforced Concrete Storm Sewer Box Culvert	29	LF	\$ 1,025.00	\$ 29,725.00
10	5-foot by 12-foot Reinforced Concrete Storm Sewer Box Culvert	73	LF	\$ 1,125.00	\$ 82,125.00
11	42-inch Flared End Section, Reinforced Concrete	1	EA	\$ 2,500.00	\$ 2,500.00
12	4-foot by 12-foot End Section, Reinforced Concrete	1	EA	\$ 15,000.00	\$ 15,000.00
13	Extra Heavy RipRap w/ Fabric	414	CY	\$ 75.00	\$ 31,050.00
14	Catch Basins 2X3-FT. Precast Storm Sewer Catch Basins.	354	VF	\$ 550.00	\$ 194,700.00
15	Catch Basins 2.5X6-FT. Precast Storm Sewer Catch Basins.	37	VF	\$ 600.00	\$ 21,900.00
16	Catch Basins 4-FT Diameter. Precast Storm Sewer Catch Basin	7	VF	\$ 600.00	\$ 4,200.00
17	Catch Basins 6-FT Diameter. Precast Storm Sewer Catch Basin	43	VF	\$ 700.00	\$ 30,100.00
18	Catch Basins 7-FT Diameter. Precast Storm Sewer Catch Basin	10	VF	\$ 725.00	\$ 6,887.50
19	Manholes 4-FT diameter. Precast Storm Sewer Manholes.	49	VF	\$ 600.00	\$ 29,100.00
20	Manholes 6-FT diameter. Precast Storm Sewer Manholes.	88	VF	\$ 700.00	\$ 61,600.02
21	Manholes 7-FT diameter. Precast Storm Sewer Manholes.	15	VF	\$ 725.00	\$ 10,875.00
22	Manholes 8-FT diameter. Precast Storm Sewer Manholes.	39	VF	\$ 750.00	\$ 29,250.00
23	Manholes Structure 41	1	EA	\$ 100,000.00	\$ 100,000.00
24	Manholes Structure 42	1	EA	\$ 125,000.00	\$ 125,000.00
25	Manholes Structure 4	1	EA	\$ 175,000.00	\$ 175,000.00
26	Manholes Diversion Structure 8	1	EA	\$ 250,000.00	\$ 250,000.00
27	Manholes/Inlets Inline	5	EA	\$ 1,000.00	\$ 5,000.00
28	Manhole Adjustments	1	EA	\$ 700.00	\$ 700.00
29	Casting Type H	51	EA	\$ 550.00	\$ 28,050.00
30	Casting R-3293-2	10	EA	\$ 2,500.00	\$ 25,000.00
31	Casting Type J	18	EA	\$ 400.00	\$ 7,200.00
32	Casting Type S	1	EA	\$ 600.00	\$ 600.00
SUBTOTAL - DIVISION A - STORM SEWER					\$ 2,227,197.52
DIVISION B - MEADOWVIEW PARK BIOFILTERS					
2	Erosion control, including installation, maintenance, and removal of stone construction entrance, silt fence, diversion ditches, and inlet protection	1	LS	\$ 20,000.00	\$ 20,000.00
3	Riffles	2	EA	\$ 5,000.00	\$ 10,000.00
4	W-Weir	1	EA	\$ 2,000.00	\$ 2,000.00
5	Vegetated Mechanically Stabilized Earth - includes erosion mat, stakes, and installation. earthwork, plugs, and whips covered under separate items	600	LF	\$ 20.00	\$ 12,000.00
6	6-inch Perforated PVC underdrain	2,426	LF	\$ 50.00	\$ 121,300.00
7	6-inch Flared End Section, PVC	4	EA	\$ 500.00	\$ 2,000.00
8	6-inch Clean Out, PVC	25	EA	\$ 500.00	\$ 12,500.00
10	12-inch PVC storm sewer	325	LF	\$ 70.00	\$ 22,750.00
11	12-inch Flared End Section, PVC	1	EA	\$ 1,000.00	\$ 1,000.00
12	Manhole 4-FT diameter, Precast Storm Sewer Manholes	7	VF	\$ 600.00	\$ 4,200.00
13	Riprap Outlet Protection	1	EA	\$ 800.00	\$ 800.00
14	Pyramat Overflow Weir	10	EA	\$ 2,500.00	\$ 25,000.00
15	Engineered Soil Media	2,675	CY	\$ 60.00	\$ 160,500.00
16	Earthwork	24,163	CY	\$ 15.00	\$ 362,445.00
17	Coconut Erosion Control Blanket	14,314	SY	\$ 2.00	\$ 28,628.00
18	Landscaping - including all seed mixes, plugs, whips, and mulch	1	LS	\$ 47,000.00	\$ 47,000.00
SUBTOTAL - DIVISION A - STORM SEWER					\$ 832,123.00
SUBTOTAL DRAINAGE ITEMS					\$ 3,059,320.52

TRAFFIC SIGNAL ITEMS					
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	1,120	L.F.	\$ 8.00	\$ 8,960.00
652.0235	CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	520	L.F.	\$ 11.00	\$ 5,720.00
652.0615	CONDUIT SPECIAL 3-INCH	620	L.F.	\$ 25.00	\$ 15,500.00
652.0800	CONDUIT LOOP DETECTOR	1,182	L.F.	\$ 2.50	\$ 2,955.00
653.0135	PULL BOXES STEEL 24X36-INCH	4	EACH	\$ 750.00	\$ 3,000.00
653.0140	PULL BOXES STEEL 24X42-INCH	11	EACH	\$ 800.00	\$ 8,800.00
654.0101	CONCRETE BASES TYPE 1	10	EACH	\$ 700.00	\$ 7,000.00
654.0105	CONCRETE BASES TYPE 5	4	EACH	\$ 1,150.00	\$ 4,600.00
SPV.0060.01	CONCRETE BASES TYPE 10	2	EACH	\$ 3,500.00	\$ 7,000.00
SPV.0060.02	CONCRETE BASES TYPE 13	2	EACH	\$ 4,800.00	\$ 9,600.00
654.0217	CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL	1	EACH	\$ 2,000.00	\$ 2,000.00
655.0230	CABLE TRAFFIC SIGNAL 5-14 AWG	600	L.F.	\$ 1.75	\$ 1,050.00
655.0240	CABLE TRAFFIC SIGNAL 7-14 AWG	1,605	L.F.	\$ 2.10	\$ 3,370.50
655.0260	CABLE TRAFFIC SIGNAL 12-14 AWG	1,510	L.F.	\$ 2.60	\$ 3,926.00
655.0320	CABLE TYPE UF 2-10 AWG GROUNDED	1,040	L.F.	\$ 3.10	\$ 3,224.00
655.0515	ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG	1,440	L.F.	\$ 1.65	\$ 2,376.00
655.0615	ELECTRICAL WIRE LIGHTING 10 AWG	1,000	L.F.	\$ 1.65	\$ 1,650.00
655.0700	LOOP DETECTOR LEAD IN CABLE	2,840	L.F.	\$ 1.80	\$ 5,112.00
655.0800	LOOP DETECTOR WIRE	3,883	L.F.	\$ 1.25	\$ 4,853.75
656.0200.01	ELECTRICAL SERVICE METER BREAKER PEDESTAL MEADOWBROOK AT ROLLING RIDGE	1	L.S.	\$ 2,500.00	\$ 2,500.00
657.0100	PEDESTAL BASES	10	EACH	\$ 190.00	\$ 1,900.00
657.0255	TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE	4	EACH	\$ 365.00	\$ 1,460.00
657.0322	POLES TYPE 5 - ALUMINUM	4	EACH	\$ 1,100.00	\$ 4,400.00
657.0405	TRAFFIC SIGNAL STANDARDS ALUMINUM 3.5-FT	1	EACH	\$ 350.00	\$ 350.00
657.0425	TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT	4	EACH	\$ 550.00	\$ 2,200.00
657.0430	TRAFFIC SIGNAL STANDARDS ALUMINUM 10-FT	5	EACH	\$ 425.00	\$ 2,125.00
657.0610	LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FT	6	EACH	\$ 200.00	\$ 1,200.00
SPV.0060.04	POLES TYPE 10	2	EACH	\$ 2,200.00	\$ 4,400.00
SPV.0060.05	POLES TYPE 12	2	EACH	\$ 3,300.00	\$ 6,600.00
SPV.0060.06	MONOTUBE ARMS 20-FT	1	EACH	\$ 1,000.00	\$ 1,000.00
SPV.0060.07	MONOTUBE ARMS 25-FT	1	EACH	\$ 1,200.00	\$ 1,200.00
SPV.0060.08	MONOTUBE ARMS 40-FT	1	EACH	\$ 1,500.00	\$ 1,500.00
SPV.0060.09	MONOTUBE ARMS 45-FT	1	EACH	\$ 1,800.00	\$ 1,800.00
SPV.0060.03	LUMINAIRE ARMS STEEL 15-FT	2	EACH	\$ 900.00	\$ 1,800.00
658.0110	TRAFFIC SIGNAL FACE 3-12 INCH VERTICAL	12	EACH	\$ 350.00	\$ 4,200.00
658.0115	TRAFFIC SIGNAL FACE 4-12 INCH VERTICAL	8	EACH	\$ 425.00	\$ 3,400.00
658.0215	BACKPLATES SIGNAL FACE 3 SECTION 12-INCH	12	EACH	\$ 70.00	\$ 840.00
658.0220	BACKPLATES SIGNAL FACE 4 SECTION 12-INCH	8	EACH	\$ 90.00	\$ 720.00
658.0500	PEDESTRIAN PUSH BUTTONS	9	EACH	\$ 365.00	\$ 3,285.00
658.0600	LED MODULES 12-INCH RED BALL	12	EACH	\$ 75.00	\$ 900.00
658.0605	LED MODULES 12-INCH YELLOW BALL	12	EACH	\$ 75.00	\$ 900.00
658.0610	LED MODULES 12-INCH GREEN BALL	12	EACH	\$ 75.00	\$ 900.00
658.0615	LED MODULES 12-INCH RED ARROW	8	EACH	\$ 75.00	\$ 600.00
658.0620	LED MODULES 12-INCH YELLOW ARROW	16	EACH	\$ 75.00	\$ 1,200.00
658.0625	LED MODULES 12-INCH GREEN ARROW	8	EACH	\$ 75.00	\$ 600.00
658.0635	LED MODULES PEDESTRIAN COUNTDOWN TIMER 16-INCH	8	EACH	\$ 275.00	\$ 2,200.00
658.5069.01	SIGNAL MOUNTING HARDWARE MEADOWBROOK AT ROLLING RIDGE	1	L.S.	\$ 1,500.00	\$ 1,500.00
659.1125	LUMINAIRES UTILITY LED C	8	EACH	\$ 475.00	\$ 3,800.00
661.0200.01	TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS MEADOWBROOK AT ROLLING RIDGE	1	L.S.	\$ 18,000.00	\$ 18,000.00
SPV.0060.10	TRAFFIC SIGNAL CONTROLLER AND CABINET 8-PHASE FULLY ACTUATED	1	EACH	\$ 19,000.00	\$ 19,000.00
SPV.0105.01	EMERGENCY VEHICLE PREEMPTION SYSTEM MEADOWBROOK AT ROLLING RIDGE	1	EACH	\$ 6,750.00	\$ 6,750.00
SPV.0105.02	TEMPORARY NON-INTRUSIVE VEHICLE DETECTION SYSTEM MEADOWBROOK AT ROLLING RIDGE	1	L.S.	\$ 7,000.00	\$ 7,000.00
SPV.0105.03	REMOVE TRAFFIC SIGNALS AND STREET LIGHTING	1	L.S.	\$ 6,250.00	\$ 6,250.00
SUBTOTAL TRAFFIC SIGNAL ITEMS				\$	217,177.25
PROJECT SUBTOTAL				\$	5,282,117.69
10%E&C				\$	528,211.77
PROJECT TOTAL				\$	5,810,329.45

****NOTE: Estimate does not include water main horizontal/vertical offsets or city-designed street lighting****