



ANDERSON, ECKSTEIN & WESTRICK, INC.
 51301 Schoenherr Road
 Shelby Township, MI 48315
 Phone: 586-726-1234
 Fax No: 586-726-8780

PRELIMINARY ESTIMATE

AEW PROJECT NO. 0175-0120

PROJECT: Water Asset Management Report Updates
 Woodside park Blvd. - Oakdale to Ridge

OWNER: City of Pleasant Ridge

PREPARED BY: Nicholas P. Todino

DATE: 2/4/2020

CHECKED BY: Michael D. Smith, PE

DATE: 2/5/2020

WORK ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<u>Water Main</u>				
_ Water Main Abandon, 8 inch	1350	FT	\$ 10.00	\$ 13,500.00
_ Fire Hydrant, Assembely	2	Each	\$ 5,000.00	\$ 10,000.00
Fire Hydrant, Rem	2	Each	\$ 675.00	\$ 1,350.00
Gate Valve and Well, 8 inch	2	Each	\$ 6,200.00	\$ 12,400.00
_ Gate Valve and Well, Rem	2	Each	\$ 1,000.00	\$ 2,000.00
_ Water Main, C900 PVC, 8 inch, Directional Drill	1350	FT	\$ 160.00	\$ 216,000.00
_ Water Main Connection, 6 inch	1	Each	\$ 3,500.00	\$ 3,500.00
_ Water Main Connection, 10 inch	1	Each	\$ 5,500.00	\$ 5,500.00
Water Service (WM to Valve Box)	16	Each	\$ 900.00	\$ 14,400.00
Water Service, Long (WM to Valve Box)	16	Each	\$ 1,900.00	\$ 30,400.00
_ Water Service, Special	32	Each	\$ 4,500.00	\$ 144,000.00
_ Mismarked Water Services	16	Hrs	\$ 350.00	\$ 5,600.00
<u>Pavement</u>				
Pavt Repr, Rem	199	Syd	\$ 10.00	\$ 1,990.00
Pavt Repr, Nonreinf Conc, 8 inch	199	Syd	\$ 90.00	\$ 17,910.00
Curb and Gutter, Rem	70	FT	\$ 10.00	\$ 700.00
_ Curb and Gutter, Conc, Det F4, Modified	70	FT	\$ 25.00	\$ 1,750.00
Sidewalk, Rem	265	Syd	\$ 9.00	\$ 2,385.00
Sidewalk, Conc, 4 inch	2300	Sft	\$ 6.00	\$ 13,800.00
Sidewalk Ramp, Conc, 8 inch	80	Sft	\$ 9.50	\$ 760.00
Aggregate Base, 6 inch	384	Syd	\$ 10.00	\$ 3,840.00
_ Driveway, Rem	169	Syd	\$ 11.00	\$ 1,859.00
Driveway, Nonreinf Conc, 8 inch	169	Syd	\$ 60.00	\$ 10,140.00
<u>Soil Erosion</u>				
_ Erosion Control, Inlet Filter	12	Each	\$ 175.00	\$ 2,100.00
_ Turf Establishment	1	LSUM	\$ 10,000.00	\$ 10,000.00
<u>MISC Work</u>				
Mobilization, Max 8%	1	LSUM	\$ 44,760.00	\$ 44,760.00
_ Traffic Control & Maintenance	1	LSUM	\$ 5,000.00	\$ 5,000.00
_ Permitting Allowance	1	LSUM	\$ 1,500.00	\$ 1,500.00
Tree, Rem, 19 inch to 36 inch	3	Each	\$ 1,200.00	\$ 3,600.00
Tree, Rem, 6 inch to 18 inch	10	Each	\$ 750.00	\$ 7,500.00
_ Tree, Rem, Less than 6 inch	7	Each	\$ 500.00	\$ 3,500.00
_ Audio Visual Record of Construction Area	1	LSUM	\$ 2,500.00	\$ 2,500.00
Maintenance Gravel	200	TON	\$ 50.00	\$ 10,000.00
TOTAL COST				\$ 604,244.00
CONSTRUCTION COST				\$ 604,244.00
Design Engineering (6.8%)				\$ 41,090.00
Construction Engineering (15%)				\$ 90,640.00
Material Testing (1.5%)				\$ 9,060.00
Contingencies (10%)				\$ 60,420.00
TOTAL COST				\$ 805,454.00

NOTE:

Design Engineering includes topographical survey, design and preparation of bid documents.

Construction Engineering includes contract administration, construction observation and staking services.



ANDERSON, ECKSTEIN & WESTRICK, INC.
 51301 Schoenherr Road
 Shelby Township, MI 48315
 Phone: 586-726-1234
 Fax No: 586-726-8780

PRELIMINARY ESTIMATE

AEW PROJECT NO. 0175-0120

PROJECT: Water Asset Management Report Updates
 Kenberton Drive - Oakdale to Ridge

OWNER: City of Pleasant Ridge

PREPARED BY: Nicholas P. Todino
 DATE: 2/4/2020

CHECKED BY: Michael D. Smith, PE
 DATE: 2/5/2020

WORK ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
Water Main				
_ Water Main Abandon, 6 inch	1360	FT	\$ 8.00	\$ 10,880.00
_ Fire Hydrant, Assembly	2	Each	\$ 5,000.00	\$ 10,000.00
Fire Hydrant, Rem	2	Each	\$ 675.00	\$ 1,350.00
Gate Valve and Well, 8 inch	2	Each	\$ 6,200.00	\$ 12,400.00
_ Gate Valve and Well, Rem	2	Each	\$ 1,000.00	\$ 2,000.00
_ Water Main, C900 PVC, 8 inch, Directional Drill	1360	FT	\$ 160.00	\$ 217,600.00
_ Water Main Connection, 6 inch	1	Each	\$ 3,500.00	\$ 3,500.00
_ Water Main Connection, 10 inch	1	Each	\$ 5,500.00	\$ 5,500.00
Water Service (WM to Valve Box)	11	Each	\$ 900.00	\$ 9,900.00
Water Service, Long (WM to Valve Box)	11	Each	\$ 1,900.00	\$ 20,900.00
_ Water Service, Special	22	Each	\$ 4,500.00	\$ 99,000.00
_ Mismarked Water Services	16	Hrs	\$ 350.00	\$ 5,600.00
Pavement				
Pavt Repr, Rem	153	Syd	\$ 10.00	\$ 1,530.00
Pavt Repr, Nonreinf Conc, 8 inch	153	Syd	\$ 90.00	\$ 13,770.00
Curb and Gutter, Rem	88	FT	\$ 10.00	\$ 880.00
_ Curb and Gutter, Conc, Det F4, Modified	88	FT	\$ 25.00	\$ 2,200.00
Sidewalk, Rem	215	Syd	\$ 9.00	\$ 1,935.00
Sidewalk, Conc, 4 inch	1859	Sft	\$ 6.00	\$ 11,154.00
Sidewalk Ramp, Conc, 8 inch	70	Sft	\$ 9.50	\$ 665.00
Aggregate Base, 6 inch	232	Syd	\$ 10.00	\$ 2,320.00
_ Driveway, Rem	59	Syd	\$ 11.00	\$ 649.00
Driveway, Nonreinf Conc, 8 inch	59	Syd	\$ 60.00	\$ 3,540.00
Soil Erosion				
_ Erosion Control, Inlet Filter	13	Each	\$ 175.00	\$ 2,275.00
_ Turf Establishment	1	LSUM	\$ 10,000.00	\$ 10,000.00
MISC Work				
Mobilization, Max 8%	1	LSUM	\$ 38,020.00	\$ 38,020.00
_ Traffic Control & Maintenance	1	LSUM	\$ 5,000.00	\$ 5,000.00
_ Permitting Allowance	1	LSUM	\$ 1,500.00	\$ 1,500.00
Tree, Rem, 19 inch to 36 inch	1	Each	\$ 1,200.00	\$ 1,200.00
Tree, Rem, 6 inch to 18 inch	6	Each	\$ 750.00	\$ 4,500.00
_ Tree, Rem, Less than 6 inch	2	Each	\$ 500.00	\$ 1,000.00
_ Audio Visual Record of Construction Area	1	LSUM	\$ 2,500.00	\$ 2,500.00
Maintenance Gravel	200	TON	\$ 50.00	\$ 10,000.00
			TOTAL COST	\$ 513,268.00
CONSTRUCTION COST				\$ 513,268.00
Design Engineering (6.9%)				\$ 35,420.00
Construction Engineering (15%)				\$ 76,990.00
Material Testing (1.5%)				\$ 7,700.00
Contingencies (10%)				\$ 51,330.00
TOTAL COST				\$ 684,708.00

NOTE:

Design Engineering includes topographical survey, design and preparation of bid documents.

Construction Engineering includes contract administration, construction observation and staking services.



ANDERSON, ECKSTEIN & WESTRICK, INC.
 51301 Schoenherr Road
 Shelby Township, MI 48315
 Phone: 586-726-1234
 Fax No: 586-726-8780

PROJECT: Water Asset Management Report Updates
 Elm Park Ave. - Oakdale to Ridge

OWNER: City of Pleasant Ridge

PREPARED BY: Nicholas P. Todino
 DATE: 2/4/2020

CHECKED BY: Michael D. Smith, PE
 DATE: 2/5/2020

PRELIMINARY ESTIMATE

AEW PROJECT NO. 0175-0120

WORK ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<u>Water Main</u>				
_ Water Main Abandon, 6 inch	1350	FT	\$ 8.00	\$ 10,800.00
_ Fire Hydrant, Assembly	3	Each	\$ 5,000.00	\$ 15,000.00
Fire Hydrant, Rem	3	Each	\$ 675.00	\$ 2,025.00
Gate Valve and Well, 8 inch	2	Each	\$ 6,200.00	\$ 12,400.00
_ Gate Valve and Well, Rem	2	Each	\$ 1,000.00	\$ 2,000.00
_ Water Main, C900 PVC, 8 inch, Directional Drill	1350	FT	\$ 160.00	\$ 216,000.00
_ Water Main Connection, 6 inch	1	Each	\$ 3,500.00	\$ 3,500.00
_ Water Main Connection, 10 inch	1	Each	\$ 5,500.00	\$ 5,500.00
Water Service (WM to Valve Box)	13	Each	\$ 900.00	\$ 11,700.00
Water Service, Long (WM to Valve Box)	13	Each	\$ 1,900.00	\$ 24,700.00
_ Water Service, Special	26	Each	\$ 4,500.00	\$ 117,000.00
_ Mismarked Water Services	16	Hrs	\$ 350.00	\$ 5,600.00
<u>Pavement</u>				
Pavt Repr, Rem	171	Syd	\$ 10.00	\$ 1,710.00
Pavt Repr, Nonreinf Conc, 8 inch	171	Syd	\$ 90.00	\$ 15,390.00
Curb and Gutter, Rem	196	FT	\$ 10.00	\$ 1,960.00
_ Curb and Gutter, Conc, Det F4, Modified	196	FT	\$ 25.00	\$ 4,900.00
Sidewalk, Rem	233	Syd	\$ 9.00	\$ 2,097.00
Sidewalk, Conc, 4 inch	2000	Sft	\$ 6.00	\$ 12,000.00
Sidewalk Ramp, Conc, 8 inch	90	Sft	\$ 9.50	\$ 855.00
Aggregate Base, 6 inch	315	Syd	\$ 10.00	\$ 3,150.00
_ Driveway, Rem	100	Syd	\$ 11.00	\$ 1,100.00
Driveway, Nonreinf Conc, 8 inch	100	Syd	\$ 60.00	\$ 6,000.00
<u>Soil Erosion</u>				
_ Erosion Control, Inlet Filter	8	Each	\$ 175.00	\$ 1,400.00
_ Turf Establishment	1	LSUM	\$ 10,000.00	\$ 10,000.00
<u>MISC Work</u>				
Mobilization, Max 8%	1	LSUM	\$ 41,030.00	\$ 41,030.00
_ Traffic Control & Maintenance	1	LSUM	\$ 5,000.00	\$ 5,000.00
_ Permitting Allowance	1	LSUM	\$ 1,500.00	\$ 1,500.00
Tree, Rem, 19 inch to 36 inch	2	Each	\$ 1,200.00	\$ 2,400.00
Tree, Rem, 6 inch to 18 inch	5	Each	\$ 750.00	\$ 3,750.00
_ Tree, Rem, Less than 6 inch	2	Each	\$ 500.00	\$ 1,000.00
_ Audio Visual Record of Construction Area	1	LSUM	\$ 2,500.00	\$ 2,500.00
Maintenance Gravel	200	TON	\$ 50.00	\$ 10,000.00
TOTAL COST				\$ 553,967.00
CONSTRUCTION COST				\$ 553,967.00
Design Engineering (6.8%)				\$ 37,670.00
Construction Engineering (15%)				\$ 83,100.00
Material Testing (1.5%)				\$ 8,310.00
Contingencies (10%)				\$ 55,400.00
TOTAL COST				\$ 738,447.00

NOTE:

Design Engineering includes topographical survey, design and preparation of bid documents.

Construction Engineering includes contract administration, construction observation and staking services.



ANDERSON, ECKSTEIN & WESTRICK, INC.
 51301 Schoenherr Road
 Shelby Township, MI 48315
 Phone: 586-726-1234
 Fax No: 586-726-8780

PROJECT: Water Asset Management Report Updates
 Norwich Road - Oakdale to Ridge

OWNER: City of Pleasant Ridge

PREPARED BY: Nicholas P. Todino
 DATE: 2/4/2020

CHECKED BY: Michael D. Smith, PE
 DATE: 2/5/2020

PRELIMINARY ESTIMATE

AEW PROJECT NO. 0175-0120

WORK ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<u>Water Main</u>				
_ Water Main Abandon, 6 inch	1360	FT	\$ 8.00	\$ 10,880.00
_ Fire Hydrant, Assembly	2	Each	\$ 5,000.00	\$ 10,000.00
Fire Hydrant, Rem	2	Each	\$ 675.00	\$ 1,350.00
Gate Valve and Well, 8 inch	3	Each	\$ 6,200.00	\$ 18,600.00
_ Gate Valve and Well, Rem	3	Each	\$ 1,000.00	\$ 3,000.00
_ Water Main, C900 PVC, 8 inch, Directional Drill	1360	FT	\$ 160.00	\$ 217,600.00
_ Water Main Connection, 6 inch	1	Each	\$ 3,500.00	\$ 3,500.00
_ Water Main Connection, 10 inch	1	Each	\$ 5,500.00	\$ 5,500.00
Water Service (WM to Valve Box)	14	Each	\$ 900.00	\$ 12,600.00
Water Service, Long (WM to Valve Box)	17	Each	\$ 1,900.00	\$ 32,300.00
_ Water Service, Special	31	Each	\$ 4,500.00	\$ 139,500.00
_ Mismarked Water Services	16	Hrs	\$ 350.00	\$ 5,600.00
<u>Pavement</u>				
Pavt Repr, Rem	207	Syd	\$ 10.00	\$ 2,070.00
Pavt Repr, Nonreinf Conc, 8 inch	207	Syd	\$ 90.00	\$ 18,630.00
Curb and Gutter, Rem	86	FT	\$ 10.00	\$ 860.00
_ Curb and Gutter, Conc, Det F4, Modified	86	FT	\$ 25.00	\$ 2,150.00
Sidewalk, Rem	252	Syd	\$ 9.00	\$ 2,268.00
Sidewalk, Conc, 4 inch	2240	Sft	\$ 6.00	\$ 13,440.00
Sidewalk Ramp, Conc, 8 inch	27	Sft	\$ 9.50	\$ 256.50
Aggregate Base, 6 inch	329	Syd	\$ 10.00	\$ 3,290.00
_ Driveway, Rem	102	Syd	\$ 11.00	\$ 1,122.00
Driveway, Nonreinf Conc, 8 inch	102	Syd	\$ 60.00	\$ 6,120.00
<u>Soil Erosion</u>				
_ Erosion Control, Inlet Filter	8	Each	\$ 175.00	\$ 1,400.00
_ Turf Establishment	1	LSUM	\$ 10,000.00	\$ 10,000.00
<u>MISC Work</u>				
Mobilization, Max 8%	1	LSUM	\$ 43,910.00	\$ 43,910.00
_ Traffic Control & Maintenance	1	LSUM	\$ 5,000.00	\$ 5,000.00
_ Permitting Allowance	1	LSUM	\$ 1,500.00	\$ 1,500.00
Tree, Rem, 19 inch to 36 inch	3	Each	\$ 1,200.00	\$ 3,600.00
Tree, Rem, 6 inch to 18 inch	5	Each	\$ 750.00	\$ 3,750.00
_ Tree, Rem, Less than 6 inch	1	Each	\$ 500.00	\$ 500.00
_ Audio Visual Record of Construction Area	1	LSUM	\$ 2,500.00	\$ 2,500.00
Maintenance Gravel	200	TON	\$ 50.00	\$ 10,000.00
TOTAL COST				\$ 592,796.50
CONSTRUCTION COST				\$ 592,796.50
Design Engineering (6.8%)				\$ 40,310.00
Construction Engineering (15%)				\$ 88,920.00
Material Testing (1.5%)				\$ 8,890.00
Contingencies (10%)				\$ 59,280.00
TOTAL COST				\$ 790,196.50

NOTE:

Design Engineering includes topographical survey, design and preparation of bid documents.

Construction Engineering includes contract administration, construction observation and staking services.



ANDERSON, ECKSTEIN & WESTRICK, INC.
 51301 Schoenherr Road
 Shelby Township, MI 48315
 Phone: 586-726-1234
 Fax No: 586-726-8780

PRELIMINARY ESTIMATE

AEW PROJECT NO. 0175-0120

PROJECT: Water Asset Management Report Updates
 Hanover Road - Oakdale to Ridge

OWNER: City of Pleasant Ridge

PREPARED BY: Nicholas P. Todino

DATE: 2/4/2020

CHECKED BY: Michael D. Smith, PE

DATE: 2/5/2020

WORK ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<u>Water Main</u>				
_ Water Main Abandon, 6 inch	1350	FT	\$ 8.00	\$ 10,800.00
_ Fire Hydrant, Assembly	2	Each	\$ 5,000.00	\$ 10,000.00
Fire Hydrant, Rem	2	Each	\$ 675.00	\$ 1,350.00
Gate Valve and Well, 8 inch	3	Each	\$ 6,200.00	\$ 18,600.00
_ Gate Valve and Well, Rem	3	Each	\$ 1,000.00	\$ 3,000.00
_ Water Main, C900 PVC, 8 inch, Directional Drill	1350	FT	\$ 160.00	\$ 216,000.00
_ Water Main Connection, 6 inch	1	Each	\$ 3,500.00	\$ 3,500.00
_ Water Main Connection, 10 inch	1	Each	\$ 5,500.00	\$ 5,500.00
Water Service (WM to Valve Box)	15	Each	\$ 900.00	\$ 13,500.00
Water Service, Long (WM to Valve Box)	20	Each	\$ 1,900.00	\$ 38,000.00
_ Water Service, Special	35	Each	\$ 4,500.00	\$ 157,500.00
_ Mismarked Water Services	16	Hrs	\$ 350.00	\$ 5,600.00
<u>Pavement</u>				
Pavt Repr, Rem	225	Syd	\$ 10.00	\$ 2,250.00
Pavt Repr, Nonreinf Conc, 8 inch	225	Syd	\$ 90.00	\$ 20,250.00
Curb and Gutter, Rem	40	FT	\$ 10.00	\$ 400.00
_ Curb and Gutter, Conc, Det F4, Modified	40	FT	\$ 25.00	\$ 1,000.00
Sidewalk, Rem	281	Syd	\$ 9.00	\$ 2,529.00
Sidewalk, Conc, 4 inch	2435	Sft	\$ 6.00	\$ 14,610.00
Sidewalk Ramp, Conc, 8 inch	90	Sft	\$ 9.50	\$ 855.00
Aggregate Base, 6 inch	327	Syd	\$ 10.00	\$ 3,270.00
_ Driveway, Rem	93	Syd	\$ 11.00	\$ 1,023.00
Driveway, Nonreinf Conc, 8 inch	93	Syd	\$ 60.00	\$ 5,580.00
<u>Soil Erosion</u>				
_ Erosion Control, Inlet Filter	8	Each	\$ 175.00	\$ 1,400.00
_ Turf Establishment	1	LSUM	\$ 10,000.00	\$ 10,000.00
<u>MISC Work</u>				
Mobilization, Max 8%	1	LSUM	\$ 45,910.00	\$ 45,910.00
_ Traffic Control & Maintenance	1	LSUM	\$ 5,000.00	\$ 5,000.00
_ Permitting Allowance	1	LSUM	\$ 1,500.00	\$ 1,500.00
Tree, Rem, 19 inch to 36 inch	3	Each	\$ 1,200.00	\$ 3,600.00
Tree, Rem, 6 inch to 18 inch	5	Each	\$ 750.00	\$ 3,750.00
_ Tree, Rem, Less than 6 inch	2	Each	\$ 500.00	\$ 1,000.00
_ Audio Visual Record of Construction Area	1	LSUM	\$ 2,500.00	\$ 2,500.00
Maintenance Gravel	200	TON	\$ 50.00	\$ 10,000.00
TOTAL COST				\$ 619,777.00
CONSTRUCTION COST				\$ 619,777.00
Design Engineering (6.8%)				\$ 42,140.00
Construction Engineering (15%)				\$ 92,970.00
Material Testing (1.5%)				\$ 9,300.00
Contingencies (10%)				\$ 61,980.00
TOTAL COST				\$ 826,167.00

NOTE:

Design Engineering includes topographical survey, design and preparation of bid documents.

Construction Engineering includes contract administration, construction observation and staking services.



ANDERSON, ECKSTEIN & WESTRICK, INC.
 51301 Schoenherr Road
 Shelby Township, MI 48315
 Phone: 586-726-1234
 Fax No: 586-726-8780

PROJECT: Water Asset Management Report Updates
 Cambridge Blvd. - Maplefield to Ridge

OWNER: City of Pleasant Ridge

PREPARED BY: Nicholas P. Todino
 DATE: 2/4/2020

CHECKED BY: Michael D. Smith, PE
 DATE: 2/5/2020

PRELIMINARY ESTIMATE

AEW PROJECT NO. 0175-0120

WORK ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<u>Water Main</u>				
_ Water Main Abandon, 6 inch	1700	FT	\$ 8.00	\$ 13,600.00
_ Fire Hydrant, Assembly	2	Each	\$ 5,000.00	\$ 10,000.00
Fire Hydrant, Rem	2	Each	\$ 675.00	\$ 1,350.00
Gate Valve and Well, 8 inch	4	Each	\$ 6,200.00	\$ 24,800.00
_ Gate Valve and Well, Rem	4	Each	\$ 1,000.00	\$ 4,000.00
_ Water Main, C900 PVC, 8 inch, Directional Drill	1700	FT	\$ 160.00	\$ 272,000.00
_ Water Main Connection, 8 inch	1	Each	\$ 4,500.00	\$ 4,500.00
_ Water Main Connection, 10 inch	1	Each	\$ 5,500.00	\$ 5,500.00
Water Service (WM to Valve Box)	18	Each	\$ 900.00	\$ 16,200.00
Water Service, Long (WM to Valve Box)	23	Each	\$ 1,900.00	\$ 43,700.00
_ Water Service, Special	41	Each	\$ 4,500.00	\$ 184,500.00
_ Mismarked Water Services	16	Hrs	\$ 350.00	\$ 5,600.00
<u>Pavement</u>				
Pavt Repr, Rem	266	Syd	\$ 10.00	\$ 2,660.00
Pavt Repr, Nonreinf Conc, 8 inch	266	Syd	\$ 90.00	\$ 23,940.00
Curb and Gutter, Rem	286	FT	\$ 10.00	\$ 2,860.00
_ Curb and Gutter, Conc, Det F4, Modified	286	FT	\$ 25.00	\$ 7,150.00
Sidewalk, Rem	336	Syd	\$ 9.00	\$ 3,024.00
Sidewalk, Conc, 4 inch	2756	Sft	\$ 6.00	\$ 16,536.00
Sidewalk Ramp, Conc, 8 inch	260	Sft	\$ 9.50	\$ 2,470.00
Aggregate Base, 6 inch	437	Syd	\$ 10.00	\$ 4,370.00
_ Driveway, Rem	107	Syd	\$ 11.00	\$ 1,177.00
Driveway, Nonreinf Conc, 8 inch	107	Syd	\$ 60.00	\$ 6,420.00
<u>Soil Erosion</u>				
_ Erosion Control, Inlet Filter	12	Each	\$ 175.00	\$ 2,100.00
_ Turf Establishment	1	LSUM	\$ 10,000.00	\$ 10,000.00
<u>MISC Work</u>				
Mobilization, Max 8%	1	LSUM	\$ 56,410.00	\$ 56,410.00
_ Traffic Control & Maintenance	1	LSUM	\$ 5,000.00	\$ 5,000.00
_ Permitting Allowance	1	LSUM	\$ 1,500.00	\$ 1,500.00
Tree, Rem, 19 inch to 36 inch	3	Each	\$ 1,200.00	\$ 3,600.00
Tree, Rem, 6 inch to 18 inch	8	Each	\$ 750.00	\$ 6,000.00
_ Tree, Rem, Less than 6 inch	6	Each	\$ 500.00	\$ 3,000.00
_ Audio Visual Record of Construction Area	1	LSUM	\$ 2,500.00	\$ 2,500.00
Maintenance Gravel	300	TON	\$ 50.00	\$ 15,000.00
			TOTAL COST	\$ 761,467.00
CONSTRUCTION COST				\$ 761,467.00
Design Engineering (6.5%)				\$ 49,500.00
Construction Engineering (15%)				\$ 114,220.00
Material Testing (1.5%)				\$ 11,420.00
Contingencies (10%)				\$ 76,150.00
TOTAL COST				\$ 1,012,757.00

NOTE:

Design Engineering includes topographical survey, design and preparation of bid documents.

Construction Engineering includes contract administration, construction observation and staking services.



ANDERSON, ECKSTEIN & WESTRICK, INC.
 51301 Schoenherr Road
 Shelby Township, MI 48315
 Phone: 586-726-1234
 Fax No: 586-726-8780

PRELIMINARY ESTIMATE

AEW PROJECT NO. 0175-0120

PROJECT: Water Asset Management Report Updates
 Oakdale Blvd. - W 10 mile to Cambridge

OWNER: City of Pleasant Ridge

PREPARED BY: Nicholas P. Todino

DATE: 2/4/2020

CHECKED BY: Michael D. Smith, PE

DATE: 2/5/2020

WORK ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
Water Main				
_ Water Main Abandon, 6 inch	2160	FT	\$ 8.00	\$ 17,280.00
_ Fire Hydrant, Assembely	5	Each	\$ 5,000.00	\$ 25,000.00
Fire Hydrant, Rem	5	Each	\$ 675.00	\$ 3,375.00
Gate Valve and Well, 8 inch	6	Each	\$ 6,200.00	\$ 37,200.00
_ Gate Valve and Well, Rem	6	Each	\$ 1,000.00	\$ 6,000.00
_ Water Main, C900 PVC, 8 inch, Directional Drill	2160	FT	\$ 160.00	\$ 345,600.00
_ Water Main Connection, 6 inch	6	Each	\$ 3,500.00	\$ 21,000.00
_ Water Main Connection, 8 inch	1	Each	\$ 4,500.00	\$ 4,500.00
Water Service (WM to Valve Box)	35	Each	\$ 900.00	\$ 31,500.00
Water Service, Long (WM to Valve Box)	39	Each	\$ 1,900.00	\$ 74,100.00
_ Water Service, Special	74	Each	\$ 4,500.00	\$ 333,000.00
_ Mismarked Water Services	16	Hrs	\$ 350.00	\$ 5,600.00
Pavement				
Pavt Repr, Rem	507	Syd	\$ 10.00	\$ 5,070.00
Pavt Repr, Nonreinf Conc, 8 inch	507	Syd	\$ 90.00	\$ 45,630.00
Curb and Gutter, Rem	1000	FT	\$ 10.00	\$ 10,000.00
_ Curb and Gutter, Conc, Det F4, Modified	1000	FT	\$ 25.00	\$ 25,000.00
Sidewalk, Rem	674	Syd	\$ 9.00	\$ 6,066.00
Sidewalk, Conc, 4 inch	5100	Sft	\$ 6.00	\$ 30,600.00
Sidewalk Ramp, Conc, 8 inch	966	Sft	\$ 9.50	\$ 9,177.00
Aggregate Base, 6 inch	880	Syd	\$ 10.00	\$ 8,800.00
_ Driveway, Rem	150	Syd	\$ 11.00	\$ 1,650.00
Driveway, Nonreinf Conc, 8 inch	150	Syd	\$ 60.00	\$ 9,000.00
Soil Erosion				
_ Erosion Control, Inlet Filter	16	Each	\$ 175.00	\$ 2,800.00
_ Turf Establishment	1	LSUM	\$ 10,000.00	\$ 10,000.00
MISC Work				
Mobilization, Max 8%	1	LSUM	\$ 89,890.00	\$ 89,890.00
_ Traffic Control & Maintenance	1	LSUM	\$ 5,000.00	\$ 5,000.00
_ Permitting Allowance	1	LSUM	\$ 1,500.00	\$ 1,500.00
Tree, Rem, 19 inch to 36 inch	6	Each	\$ 1,200.00	\$ 7,200.00
Tree, Rem, 6 inch to 18 inch	18	Each	\$ 750.00	\$ 13,500.00
_ Tree, Rem, Less than 6 inch	12	Each	\$ 500.00	\$ 6,000.00
_ Audio Visual Record of Construction Area	1	LSUM	\$ 2,500.00	\$ 2,500.00
Maintenance Gravel	400	TON	\$ 50.00	\$ 20,000.00
TOTAL COST				\$ 1,213,538.00
CONSTRUCTION COST				\$ 1,213,538.00
Design Engineering (5.4%)				\$ 65,530.00
Construction Engineering (15%)				\$ 182,030.00
Material Testing (1.5%)				\$ 18,200.00
Contingencies (10%)				\$ 121,350.00
TOTAL COST				\$ 1,600,648.00

NOTE:

Design Engineering includes topographical survey, design and preparation of bid documents.

Construction Engineering includes contract administration, construction observation and staking services.



ANDERSON, ECKSTEIN & WESTRICK, INC.
 51301 Schoenherr Road
 Shelby Township, MI 48315
 Phone: 586-726-1234
 Fax No: 586-726-8780

PRELIMINARY ESTIMATE

AEW PROJECT NO. 0175-0120

PROJECT: Water Asset Management Report Updates
 Ridge Road - I696 to South Side

OWNER: City of Pleasant Ridge

PREPARED BY: Nicholas P. Todino
 DATE: 2/4/2020

CHECKED BY: Michael D. Smith, PE
 DATE: 2/5/2020

WORK ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
Water Main				
_ Water Main Abandon, 10 inch	2420	FT	\$ 11.00	\$ 26,620.00
_ Fire Hydrant, Assembly	4	Each	\$ 5,000.00	\$ 20,000.00
Fire Hydrant, Rem	4	Each	\$ 675.00	\$ 2,700.00
Gate Valve and Well, 8 inch	4	Each	\$ 6,200.00	\$ 24,800.00
_ Gate Valve and Well, Rem	4	Each	\$ 1,000.00	\$ 4,000.00
_ Water Main, C900 PVC, 8 inch, Directional Drill	2420	FT	\$ 160.00	\$ 387,200.00
_ Water Main Connection, 6 inch	5	Each	\$ 3,500.00	\$ 17,500.00
_ Water Main Connection, 8 inch	5	Each	\$ 4,500.00	\$ 22,500.00
_ Water Main Connection, 10 inch	3	Each	\$ 5,500.00	\$ 16,500.00
Water Service (WM to Valve Box)	23	Each	\$ 900.00	\$ 20,700.00
Water Service, Long (WM to Valve Box)	9	Each	\$ 1,900.00	\$ 17,100.00
_ Water Service, Special	32	Each	\$ 4,500.00	\$ 144,000.00
_ Mismarked Water Services	16	Hrs	\$ 350.00	\$ 5,600.00
Pavement				
Pavt Repr, Rem	365	Syd	\$ 10.00	\$ 3,650.00
Pavt Repr, Nonreinf Conc, 8 inch	365	Syd	\$ 90.00	\$ 32,850.00
Curb and Gutter, Rem	220	FT	\$ 10.00	\$ 2,200.00
_ Curb and Gutter, Conc, Det F4, Modified	220	FT	\$ 25.00	\$ 5,500.00
Sidewalk, Rem	408	Syd	\$ 9.00	\$ 3,672.00
Sidewalk, Conc, 4 inch	2352	Sft	\$ 6.00	\$ 14,112.00
Sidewalk Ramp, Conc, 8 inch	1315	Sft	\$ 9.50	\$ 12,492.50
Aggregate Base, 6 inch	509	Syd	\$ 10.00	\$ 5,090.00
_ Driveway, Rem	95	Syd	\$ 11.00	\$ 1,045.00
Driveway, Nonreinf Conc, 8 inch	95	Syd	\$ 60.00	\$ 5,700.00
Soil Erosion				
_ Erosion Control, Inlet Filter	24	Each	\$ 175.00	\$ 4,200.00
_ Turf Establishment	1	LSUM	\$ 10,000.00	\$ 10,000.00
MISC Work				
Mobilization, Max 8%	1	LSUM	\$ 68,880.00	\$ 68,880.00
_ Traffic Control & Maintenance	1	LSUM	\$ 5,000.00	\$ 5,000.00
_ Permitting Allowance	1	LSUM	\$ 1,500.00	\$ 1,500.00
Tree, Rem, 19 inch to 36 inch	5	Each	\$ 1,200.00	\$ 6,000.00
Tree, Rem, 6 inch to 18 inch	15	Each	\$ 750.00	\$ 11,250.00
_ Tree, Rem, Less than 6 inch	10	Each	\$ 500.00	\$ 5,000.00
_ Audio Visual Record of Construction Area	1	LSUM	\$ 2,500.00	\$ 2,500.00
Maintenance Gravel	400	TON	\$ 50.00	\$ 20,000.00
TOTAL COST				\$ 929,861.50
CONSTRUCTION COST				\$ 929,861.50
Design Engineering (6.3%)				\$ 58,580.00
Construction Engineering (15%)				\$ 139,480.00
Material Testing (1.5%)				\$ 13,950.00
Contingencies (10%)				\$ 92,990.00
TOTAL COST				\$ 1,234,861.50
NOTE:				
Design Engineering includes topographical survey, design and preparation of bid documents.				
Construction Engineering includes contract administration, construction observation and staking services.				



ANDERSON, ECKSTEIN & WESTRICK, INC.
 51301 Schoenherr Road
 Shelby Township, MI 48315
 Phone: 586-726-1234
 Fax No: 586-726-8780

PRELIMINARY ESTIMATE

AEW PROJECT NO. 0175-0120

PROJECT: Water Asset Management Report Updates
 Poplar Park Blvd. - Ridge to Woodward

OWNER: City of Pleasant Ridge

PREPARED BY: Nicholas P. Todino
 DATE: 2/4/2020

CHECKED BY: Michael D. Smith, PE
 DATE: 2/5/2020

WORK ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<u>Water Main</u>				
_ Water Main Abandon, 6 inch	1140	FT	\$ 8.00	\$ 9,120.00
_ Fire Hydrant, Assembly	2	Each	\$ 5,000.00	\$ 10,000.00
Fire Hydrant, Rem	2	Each	\$ 675.00	\$ 1,350.00
Gate Valve and Well, 8 inch	2	Each	\$ 6,200.00	\$ 12,400.00
_ Gate Valve and Well, Rem	2	Each	\$ 1,000.00	\$ 2,000.00
_ Water Main, C900 PVC, 8 inch, Directional Drill	1140	FT	\$ 160.00	\$ 182,400.00
_ Water Main Connection, 10 inch	1	Each	\$ 5,500.00	\$ 5,500.00
_ Water Main Connection, 48 inch	1	Each	\$ 30,000.00	\$ 30,000.00
Water Service (WM to Valve Box)	10	Each	\$ 900.00	\$ 9,000.00
Water Service, Long (WM to Valve Box)	11	Each	\$ 1,900.00	\$ 20,900.00
_ Water Service, Special	21	Each	\$ 4,500.00	\$ 94,500.00
_ Mismarked Water Services	16	Hrs	\$ 350.00	\$ 5,600.00
<u>Pavement</u>				
Pavt Repr, Rem	130	Syd	\$ 10.00	\$ 1,300.00
Pavt Repr, Nonreinf Conc, 8 inch	130	Syd	\$ 90.00	\$ 11,700.00
Curb and Gutter, Rem	142	FT	\$ 10.00	\$ 1,420.00
_ Curb and Gutter, Conc, Det F4, Modified	142	FT	\$ 25.00	\$ 3,550.00
Sidewalk, Rem	188	Syd	\$ 9.00	\$ 1,692.00
Sidewalk, Conc, 4 inch	1505	Sft	\$ 6.00	\$ 9,030.00
Sidewalk Ramp, Conc, 8 inch	182	Sft	\$ 9.50	\$ 1,729.00
Aggregate Base, 6 inch	312	Syd	\$ 10.00	\$ 3,120.00
_ Driveway, Rem	150	Syd	\$ 11.00	\$ 1,650.00
Driveway, Nonreinf Conc, 8 inch	150	Syd	\$ 60.00	\$ 9,000.00
<u>Soil Erosion</u>				
_ Erosion Control, Inlet Filter	12	Each	\$ 175.00	\$ 2,100.00
_ Turf Establishment	1	LSUM	\$ 10,000.00	\$ 10,000.00
<u>MISC Work</u>				
Mobilization, Max 8%	1	LSUM	\$ 38,410.00	\$ 38,410.00
_ Traffic Control & Maintenance	1	LSUM	\$ 5,000.00	\$ 5,000.00
_ Permitting Allowance	1	LSUM	\$ 1,500.00	\$ 1,500.00
Tree, Rem, 19 inch to 36 inch	4	Each	\$ 1,200.00	\$ 4,800.00
Tree, Rem, 6 inch to 18 inch	13	Each	\$ 750.00	\$ 9,750.00
_ Tree, Rem, Less than 6 inch	5	Each	\$ 500.00	\$ 2,500.00
_ Audio Visual Record of Construction Area	1	LSUM	\$ 2,500.00	\$ 2,500.00
Maintenance Gravel	300	TON	\$ 50.00	\$ 15,000.00
TOTAL COST				\$ 518,521.00
CONSTRUCTION COST				\$ 518,521.00
Design Engineering (6.9%)				\$ 35,780.00
Construction Engineering (15%)				\$ 77,780.00
Material Testing (1.5%)				\$ 7,780.00
Contingencies (10%)				\$ 51,850.00
TOTAL COST				\$ 691,711.00

NOTE:

Design Engineering includes topographical survey, design and preparation of bid documents.

Construction Engineering includes contract administration, construction observation and staking services.



ANDERSON, ECKSTEIN & WESTRICK, INC.
 51301 Schoenherr Road
 Shelby Township, MI 48315
 Phone: 586-726-1234
 Fax No: 586-726-8780

PROJECT: Water Asset Management Report Updates
 Oakland Park Blvd. - Ridge to Woodward

OWNER: City of Pleasant Ridge

PREPARED BY: Nicholas P. Todino
 DATE: 2/4/2020

CHECKED BY: Michael D. Smith, PE
 DATE: 2/5/2020

PRELIMINARY ESTIMATE

AEW PROJECT NO. 0175-0120

WORK ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<u>Water Main</u>				
_ Water Main Abandon, 8 inch	1680	FT	\$ 10.00	\$ 16,800.00
_ Fire Hydrant, Assembly	3	Each	\$ 5,000.00	\$ 15,000.00
Fire Hydrant, Rem	3	Each	\$ 675.00	\$ 2,025.00
Gate Valve and Well, 8 inch	2	Each	\$ 6,200.00	\$ 12,400.00
_ Gate Valve and Well, Rem	2	Each	\$ 1,000.00	\$ 2,000.00
_ Water Main, C900 PVC, 8 inch, Directional Drill	1680	FT	\$ 160.00	\$ 268,800.00
_ Water Main Connection, 10 inch	1	Each	\$ 5,500.00	\$ 5,500.00
_ Water Main Connection, 48 inch	1	Each	\$ 30,000.00	\$ 30,000.00
Water Service (WM to Valve Box)	14	Each	\$ 900.00	\$ 12,600.00
Water Service, Long (WM to Valve Box)	17	Each	\$ 1,900.00	\$ 32,300.00
_ Water Service, Special	31	Each	\$ 4,500.00	\$ 139,500.00
_ Mismarked Water Services	16	Hrs	\$ 350.00	\$ 5,600.00
<u>Pavement</u>				
Pavt Repr, Rem	194	Syd	\$ 10.00	\$ 1,940.00
Pavt Repr, Nonreinf Conc, 8 inch	194	Syd	\$ 90.00	\$ 17,460.00
Curb and Gutter, Rem	216	FT	\$ 10.00	\$ 2,160.00
_ Curb and Gutter, Conc, Det F4, Modified	216	FT	\$ 25.00	\$ 5,400.00
Sidewalk, Rem	234	Syd	\$ 9.00	\$ 2,106.00
Sidewalk, Conc, 4 inch	1916	Sft	\$ 6.00	\$ 11,496.00
Sidewalk Ramp, Conc, 8 inch	184	Sft	\$ 9.50	\$ 1,748.00
Aggregate Base, 6 inch	365	Syd	\$ 10.00	\$ 3,650.00
_ Driveway, Rem	123	Syd	\$ 11.00	\$ 1,353.00
Driveway, Nonreinf Conc, 8 inch	123	Syd	\$ 60.00	\$ 7,380.00
<u>Soil Erosion</u>				
_ Erosion Control, Inlet Filter	10	Each	\$ 175.00	\$ 1,750.00
_ Turf Establishment	1	LSUM	\$ 10,000.00	\$ 10,000.00
<u>MISC Work</u>				
Mobilization, Max 8%	1	LSUM	\$ 52,220.00	\$ 52,220.00
_ Traffic Control & Maintenance	1	LSUM	\$ 5,000.00	\$ 5,000.00
_ Permitting Allowance	1	LSUM	\$ 1,500.00	\$ 1,500.00
Tree, Rem, 19 inch to 36 inch	4	Each	\$ 1,200.00	\$ 4,800.00
Tree, Rem, 6 inch to 18 inch	10	Each	\$ 750.00	\$ 7,500.00
_ Tree, Rem, Less than 6 inch	15	Each	\$ 500.00	\$ 7,500.00
_ Audio Visual Record of Construction Area	1	LSUM	\$ 2,500.00	\$ 2,500.00
Maintenance Gravel	300	TON	\$ 50.00	\$ 15,000.00
TOTAL COST				\$ 704,988.00
CONSTRUCTION COST				\$ 704,988.00
Design Engineering (6.6%)				\$ 46,530.00
Construction Engineering (15%)				\$ 105,750.00
Material Testing (1.5%)				\$ 10,570.00
Contingencies (10%)				\$ 70,500.00
TOTAL COST				\$ 938,338.00

NOTE:

Design Engineering includes topographical survey, design and preparation of bid documents.

Construction Engineering includes contract administration, construction observation and staking services.



ANDERSON, ECKSTEIN & WESTRICK, INC.
 51301 Schoenherr Road
 Shelby Township, MI 48315
 Phone: 586-726-1234
 Fax No: 586-726-8780

PRELIMINARY ESTIMATE

AEW PROJECT NO. 0175-0120

PROJECT: Water Asset Management Report Updates
 Oxford Blvd. - Ridge to Woodward

OWNER: City of Pleasant Ridge

PREPARED BY: Nicholas P. Todino
 DATE: 2/4/2020

CHECKED BY: Michael D. Smith, PE
 DATE: 2/5/2020

WORK ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
Water Main				
_ Water Main Abandon, 10 inch	1860	FT	\$ 11.00	\$ 20,460.00
_ Fire Hydrant, Assembly	4	Each	\$ 5,000.00	\$ 20,000.00
Fire Hydrant, Rem	4	Each	\$ 675.00	\$ 2,700.00
Gate Valve and Well, 8 inch	5	Each	\$ 6,200.00	\$ 31,000.00
_ Gate Valve and Well, Rem	7	Each	\$ 1,000.00	\$ 7,000.00
_ Water Main, C900 PVC, 8 inch, Directional Drill	1860	FT	\$ 160.00	\$ 297,600.00
_ Water Main Connection, 10 inch	1	Each	\$ 5,500.00	\$ 5,500.00
_ Water Main Connection, 12 inch	1	Each	\$ 6,000.00	\$ 6,000.00
_ Water Main Connection, 48 inch	1	Each	\$ 30,000.00	\$ 30,000.00
Water Service (WM to Valve Box)	25	Each	\$ 900.00	\$ 22,500.00
Water Service, Long (WM to Valve Box)	23	Each	\$ 1,900.00	\$ 43,700.00
_ Water Service, Special	48	Each	\$ 4,500.00	\$ 216,000.00
_ Mismarked Water Services	16	Hrs	\$ 350.00	\$ 5,600.00
Pavement				
Pavt Repr, Rem	236	Syd	\$ 10.00	\$ 2,360.00
Pavt Repr, Nonreinf Conc, 8 inch	236	Syd	\$ 90.00	\$ 21,240.00
Curb and Gutter, Rem	280	FT	\$ 10.00	\$ 2,800.00
_ Curb and Gutter, Conc, Det F4, Modified	280	FT	\$ 25.00	\$ 7,000.00
Sidewalk, Rem	429	Syd	\$ 9.00	\$ 3,861.00
Sidewalk, Conc, 4 inch	3484	Sft	\$ 6.00	\$ 20,904.00
Sidewalk Ramp, Conc, 8 inch	377	Sft	\$ 9.50	\$ 3,581.50
Aggregate Base, 6 inch	602	Syd	\$ 10.00	\$ 6,020.00
_ Driveway, Rem	303	Syd	\$ 11.00	\$ 3,333.00
Driveway, Nonreinf Conc, 8 inch	303	Syd	\$ 60.00	\$ 18,180.00
Soil Erosion				
_ Erosion Control, Inlet Filter	6	Each	\$ 175.00	\$ 1,050.00
_ Turf Establishment	1	LSUM	\$ 10,000.00	\$ 10,000.00
MISC Work				
Mobilization, Max 8%	1	LSUM		\$ -
_ Traffic Control & Maintainance	1	LSUM	\$ 5,000.00	\$ 5,000.00
_ Permitting Allowance	1	LSUM	\$ 1,500.00	\$ 1,500.00
Tree, Rem, 19 inch to 36 inch	7	Each	\$ 1,200.00	\$ 8,400.00
Tree, Rem, 6 inch to 18 inch	13	Each	\$ 750.00	\$ 9,750.00
_ Tree, Rem, Less than 6 inch	4	Each	\$ 500.00	\$ 2,000.00
_ Audio Visual Record of Construction Area	1	LSUM	\$ 2,500.00	\$ 2,500.00
Maintenance Gravel	500	TON	\$ 50.00	\$ 25,000.00
			TOTAL COST	\$ 862,539.50
CONSTRUCTION COST				\$ 862,539.50
Design Engineering (6.4%)				\$ 55,200.00
Construction Engineering (15%)				\$ 129,380.00
Material Testing (1.5%)				\$ 12,940.00
Contingencies (10%)				\$ 86,250.00
TOTAL COST				\$ 1,146,309.50
NOTE:				
Design Engineering includes topographical survey, design and preparation of bid documents.				
Construction Engineering includes contract administration, construction observation and staking services.				



ANDERSON, ECKSTEIN & WESTRICK, INC.
 51301 Schoenherr Road
 Shelby Township, MI 48315
 Phone: 586-726-1234
 Fax No: 586-726-8780

PRELIMINARY ESTIMATE

AEW PROJECT NO. 0175-0120

PROJECT: Water Asset Management Report Updates
 Cambridge Blvd. - Oxford to Woodward

OWNER: City of Pleasant Ridge

PREPARED BY: Nicholas P. Todino

DATE: 2/4/2020

CHECKED BY: Michael D. Smith, PE

DATE: 2/5/2020

WORK ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<u>Water Main</u>				
_ Water Main Abandon, 6 inch	2200	FT	\$ 8.00	\$ 17,600.00
_ Fire Hydrant, Assembly	5	Each	\$ 5,000.00	\$ 25,000.00
Fire Hydrant, Rem	5	Each	\$ 675.00	\$ 3,375.00
Gate Valve and Well, 8 inch	3	Each	\$ 6,200.00	\$ 18,600.00
_ Gate Valve and Well, Rem	3	Each	\$ 1,000.00	\$ 3,000.00
_ Water Main, C900 PVC, 8 inch, Directional Drill	2200	FT	\$ 160.00	\$ 352,000.00
_ Water Main Connection, 8 inch	1	Each	\$ 4,500.00	\$ 4,500.00
_ Water Main Connection, 10 inch	2	Each	\$ 5,500.00	\$ 11,000.00
Water Service (WM to Valve Box)	27	Each	\$ 900.00	\$ 24,300.00
Water Service, Long (WM to Valve Box)	29	Each	\$ 1,900.00	\$ 55,100.00
_ Water Service, Special	56	Each	\$ 4,500.00	\$ 252,000.00
_ Mismarked Water Services	16	Hrs	\$ 350.00	\$ 5,600.00
<u>Pavement</u>				
Pavt Repr, Rem	92	Syd	\$ 10.00	\$ 920.00
Pavt Repr, Nonreinf Conc, 8 inch	92	Syd	\$ 90.00	\$ 8,280.00
Curb and Gutter, Rem	86	FT	\$ 10.00	\$ 860.00
_ Curb and Gutter, Conc, Det F4, Modified	86	FT	\$ 25.00	\$ 2,150.00
Sidewalk, Rem	427	Syd	\$ 9.00	\$ 3,843.00
Sidewalk, Conc, 4 inch	3835	Sft	\$ 6.00	\$ 23,010.00
Aggregate Base, 6 inch	520	Syd	\$ 10.00	\$ 5,200.00
_ Driveway, Rem	408	Syd	\$ 11.00	\$ 4,488.00
Driveway, Nonreinf Conc, 8 inch	408	Syd	\$ 60.00	\$ 24,480.00
<u>Soil Erosion</u>				
_ Erosion Control, Inlet Filter	14	Each	\$ 175.00	\$ 2,450.00
_ Turf Establishment	1	LSUM	\$ 10,000.00	\$ 10,000.00
<u>MISC Work</u>				
Mobilization, Max 8%	1	LSUM	\$ 72,610.00	\$ 72,610.00
_ Traffic Control & Maintainance	1	LSUM	\$ 5,000.00	\$ 5,000.00
_ Permitting Allowance	1	LSUM	\$ 1,500.00	\$ 1,500.00
Tree, Rem, 19 inch to 36 inch	7	Each	\$ 1,200.00	\$ 8,400.00
Tree, Rem, 6 inch to 18 inch	8	Each	\$ 750.00	\$ 6,000.00
_ Tree, Rem, Less than 6 inch	3	Each	\$ 500.00	\$ 1,500.00
_ Audio Visual Record of Construction Area	1	LSUM	\$ 2,500.00	\$ 2,500.00
Maintenance Gravel	500	TON	\$ 50.00	\$ 25,000.00
TOTAL COST				\$ 980,266.00
CONSTRUCTION COST				\$ 980,266.00
Design Engineering (6.3%)				\$ 61,760.00
Construction Engineering (15%)				\$ 147,040.00
Material Testing (1.5%)				\$ 14,700.00
Contingencies (10%)				\$ 98,030.00
TOTAL COST				\$ 1,301,796.00

NOTE:

Design Engineering includes topographical survey, design and preparation of bid documents.

Construction Engineering includes contract administration, construction observation and staking services.



ANDERSON, ECKSTEIN & WESTRICK, INC.
 51301 Schoenherr Road
 Shelby Township, MI 48315
 Phone: 586-726-1234
 Fax No: 586-726-8780

PROJECT: Water Asset Management Report Updates
 Kensington Blvd. - South Main to End

OWNER: City of Pleasant Ridge

PREPARED BY: Nicholas P. Todino
 DATE: 2/4/2020

CHECKED BY: Michael D. Smith, PE
 DATE: 2/5/2020

PRELIMINARY ESTIMATE

AEW PROJECT NO. 0175-0120

WORK ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<u>Water Main</u>				
_ Water Main Abandon, 6 inch	2050	FT	\$ 8.00	\$ 16,400.00
_ Fire Hydrant, Assembly	4	Each	\$ 5,000.00	\$ 20,000.00
Fire Hydrant, Rem	4	Each	\$ 675.00	\$ 2,700.00
Gate Valve and Well, 8 inch	3	Each	\$ 6,200.00	\$ 18,600.00
_ Gate Valve and Well, Rem	3	Each	\$ 1,000.00	\$ 3,000.00
_ Water Main, C900 PVC, 8 inch, Directional Drill	2050	FT	\$ 160.00	\$ 328,000.00
_ Water Main Connection, 6 inch	1	Each	\$ 3,500.00	\$ 3,500.00
_ Water Main Connection, 12 inch	1	Each	\$ 6,000.00	\$ 6,000.00
Water Service (WM to Valve Box)	45	Each	\$ 900.00	\$ 40,500.00
Water Service, Long (WM to Valve Box)	46	Each	\$ 1,900.00	\$ 87,400.00
_ Water Service, Special	91	Each	\$ 4,500.00	\$ 409,500.00
_ Mismarked Water Services	16	Hrs	\$ 350.00	\$ 5,600.00
<u>Pavement</u>				
Pavt Repr, Rem	317	Syd	\$ 10.00	\$ 3,170.00
Pavt Repr, Nonreinf Conc, 8 inch	317	Syd	\$ 90.00	\$ 28,530.00
Curb and Gutter, Rem	380	FT	\$ 10.00	\$ 3,800.00
_ Curb and Gutter, Conc, Det F4, Modified	380	FT	\$ 25.00	\$ 9,500.00
Sidewalk, Rem	675	Syd	\$ 9.00	\$ 6,075.00
Sidewalk, Conc, 4 inch	6074	Sft	\$ 6.00	\$ 36,444.00
Sidewalk Ramp, Conc, 8 inch	188	Sft	\$ 9.50	\$ 1,786.00
Aggregate Base, 6 inch	495	Syd	\$ 10.00	\$ 4,950.00
_ Driveway, Rem	393	Syd	\$ 11.00	\$ 4,323.00
Driveway, Nonreinf Conc, 8 inch	393	Syd	\$ 60.00	\$ 23,580.00
<u>Soil Erosion</u>				
_ Erosion Control, Inlet Filter	16	Each	\$ 175.00	\$ 2,800.00
_ Turf Establishment	1	LSUM	\$ 10,000.00	\$ 10,000.00
<u>MISC Work</u>				
Mobilization, Max 8%	1	LSUM	\$ 90,320.00	\$ 90,320.00
_ Traffic Control & Maintenance	1	LSUM	\$ 5,000.00	\$ 5,000.00
_ Permitting Allowance	1	LSUM	\$ 1,500.00	\$ 1,500.00
Tree, Rem, 19 inch to 36 inch	3	Each	\$ 1,200.00	\$ 3,600.00
Tree, Rem, 6 inch to 18 inch	17	Each	\$ 750.00	\$ 12,750.00
_ Tree, Rem, Less than 6 inch	5	Each	\$ 500.00	\$ 2,500.00
_ Audio Visual Record of Construction Area	1	LSUM	\$ 2,500.00	\$ 2,500.00
Maintenance Gravel	500	TON	\$ 50.00	\$ 25,000.00
TOTAL COST				\$ 1,219,328.00
CONSTRUCTION COST				\$ 1,219,328.00
Design Engineering (5.4%)				\$ 65,840.00
Construction Engineering (15%)				\$ 182,900.00
Material Testing (1.5%)				\$ 18,290.00
Contingencies (10%)				\$ 121,930.00
TOTAL COST				\$ 1,608,288.00

NOTE:

Design Engineering includes topographical survey, design and preparation of bid documents.

Construction Engineering includes contract administration, construction observation and staking services.



ANDERSON, ECKSTEIN & WESTRICK, INC.
 51301 Schoenherr Road
 Shelby Township, MI 48315
 Phone: 586-726-1234
 Fax No: 586-726-8780

PROJECT: Water Asset Management Report Updates
 Devonshire Road - Woodward to End

OWNER: City of Pleasant Ridge

PREPARED BY: Nicholas P. Todino
 DATE: 2/4/2020

CHECKED BY: Michael D. Smith, PE
 DATE: 2/5/2020

PRELIMINARY ESTIMATE

AEW PROJECT NO. 0175-0120

WORK ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
Water Main				
_ Water Main Abandon, 6 inch	2260	FT	\$ 8.00	\$ 18,080.00
_ Fire Hydrant, Assembly	5	Each	\$ 5,000.00	\$ 25,000.00
Fire Hydrant, Rem	5	Each	\$ 675.00	\$ 3,375.00
Gate Valve and Well, 8 inch	3	Each	\$ 6,200.00	\$ 18,600.00
_ Gate Valve and Well, Rem	3	Each	\$ 1,000.00	\$ 3,000.00
_ Water Main, C900 PVC, 8 inch, Directional Drill	2260	FT	\$ 160.00	\$ 361,600.00
_ Water Main Connection, 6 inch	1	Each	\$ 3,500.00	\$ 3,500.00
_ Water Main Connection, 12 inch	1	Each	\$ 6,000.00	\$ 6,000.00
Water Service (WM to Valve Box)	38	Each	\$ 900.00	\$ 34,200.00
Water Service, Long (WM to Valve Box)	36	Each	\$ 1,900.00	\$ 68,400.00
_ Water Service, Special	74	Each	\$ 4,500.00	\$ 333,000.00
_ Mismarked Water Services	16	Hrs	\$ 350.00	\$ 5,600.00
Pavement				
Pavt Repr, Rem	392	Syd	\$ 10.00	\$ 3,920.00
Pavt Repr, Nonreinf Conc, 8 inch	392	Syd	\$ 90.00	\$ 35,280.00
Curb and Gutter, Rem	484	FT	\$ 10.00	\$ 4,840.00
_ Curb and Gutter, Conc, Det F4, Modified	484	FT	\$ 25.00	\$ 12,100.00
Sidewalk, Rem	637	Syd	\$ 9.00	\$ 5,733.00
Sidewalk, Conc, 4 inch	5029	Sft	\$ 6.00	\$ 30,174.00
Sidewalk Ramp, Conc, 8 inch	700	Sft	\$ 9.50	\$ 6,650.00
Aggregate Base, 6 inch	852	Syd	\$ 10.00	\$ 8,520.00
_ Driveway, Rem	352	Syd	\$ 11.00	\$ 3,872.00
Driveway, Nonreinf Conc, 8 inch	352	Syd	\$ 60.00	\$ 21,120.00
Soil Erosion				
_ Erosion Control, Inlet Filter	8	Each	\$ 175.00	\$ 1,400.00
_ Turf Establishment	1	LSUM	\$ 10,000.00	\$ 10,000.00
MISC Work				
Mobilization, Max 8%	1	LSUM	\$ 86,150.00	\$ 86,150.00
_ Traffic Control & Maintenance	1	LSUM	\$ 5,000.00	\$ 5,000.00
_ Permitting Allowance	1	LSUM	\$ 1,500.00	\$ 1,500.00
Tree, Rem, 19 inch to 36 inch	6	Each	\$ 1,200.00	\$ 7,200.00
Tree, Rem, 6 inch to 18 inch	13	Each	\$ 750.00	\$ 9,750.00
_ Tree, Rem, Less than 6 inch	4	Each	\$ 500.00	\$ 2,000.00
_ Audio Visual Record of Construction Area	1	LSUM	\$ 2,500.00	\$ 2,500.00
Maintenance Gravel	500	TON	\$ 50.00	\$ 25,000.00
TOTAL COST				\$ 1,163,064.00
CONSTRUCTION COST				\$ 1,163,064.00
Design Engineering (5.5%)				\$ 63,970.00
Construction Engineering (15%)				\$ 174,460.00
Material Testing (1.5%)				\$ 17,450.00
Contingencies (10%)				\$ 116,310.00
TOTAL COST				\$ 1,535,254.00

NOTE:

Design Engineering includes topographical survey, design and preparation of bid documents.

Construction Engineering includes contract administration, construction observation and staking services.



ANDERSON, ECKSTEIN & WESTRICK, INC.
 51301 Schoenherr Road
 Shelby Township, MI 48315
 Phone: 586-726-1234
 Fax No: 586-726-8780

PROJECT: Water Asset Management Report Updates
 Wellesley Drive - Woodward to End

OWNER: City of Pleasant Ridge

PREPARED BY: Nicholas P. Todino
 DATE: 2/4/2020

CHECKED BY: Michael D. Smith, PE
 DATE: 2/5/2020

PRELIMINARY ESTIMATE

AEW PROJECT NO. 0175-0120

WORK ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<u>Water Main</u>				
_ Water Main Abandon, 6 inch	2170	FT	\$ 8.00	\$ 17,360.00
_ Fire Hydrant, Assembly	5	Each	\$ 5,000.00	\$ 25,000.00
Fire Hydrant, Rem	5	Each	\$ 675.00	\$ 3,375.00
Gate Valve and Well, 8 inch	3	Each	\$ 6,200.00	\$ 18,600.00
_ Gate Valve and Well, Rem	3	Each	\$ 1,000.00	\$ 3,000.00
_ Water Main, C900 PVC, 8 inch, Directional Drill	2170	FT	\$ 160.00	\$ 347,200.00
_ Water Main Connection, 6 inch	2	Each	\$ 3,500.00	\$ 7,000.00
_ Water Main Connection, 12 inch	1	Each	\$ 6,000.00	\$ 6,000.00
Water Service (WM to Valve Box)	46	Each	\$ 900.00	\$ 41,400.00
Water Service, Long (WM to Valve Box)	41	Each	\$ 1,900.00	\$ 77,900.00
_ Water Service, Special	87	Each	\$ 4,500.00	\$ 391,500.00
_ Mismarked Water Services	16	Hrs	\$ 350.00	\$ 5,600.00
<u>Pavement</u>				
Pavt Repr, Rem	374	Syd	\$ 10.00	\$ 3,740.00
Pavt Repr, Nonreinf Conc, 8 inch	374	Syd	\$ 90.00	\$ 33,660.00
Curb and Gutter, Rem	460	FT	\$ 10.00	\$ 4,600.00
_ Curb and Gutter, Conc, Det F4, Modified	460	FT	\$ 25.00	\$ 11,500.00
Sidewalk, Rem	689	Syd	\$ 9.00	\$ 6,201.00
Sidewalk, Conc, 4 inch	5763	Sft	\$ 6.00	\$ 34,578.00
Sidewalk Ramp, Conc, 8 inch	432	Sft	\$ 9.50	\$ 4,104.00
Aggregate Base, 6 inch	883	Syd	\$ 10.00	\$ 8,830.00
_ Driveway, Rem	406	Syd	\$ 11.00	\$ 4,466.00
Driveway, Nonreinf Conc, 8 inch	406	Syd	\$ 60.00	\$ 24,360.00
<u>Soil Erosion</u>				
_ Erosion Control, Inlet Filter	9	Each	\$ 175.00	\$ 1,575.00
_ Turf Establishment	1	LSUM	\$ 10,000.00	\$ 10,000.00
<u>MISC Work</u>				
Mobilization, Max 8%	1	LSUM	\$ 91,600.00	\$ 91,600.00
_ Traffic Control & Maintenance	1	LSUM	\$ 5,000.00	\$ 5,000.00
_ Permitting Allowance	1	LSUM	\$ 1,500.00	\$ 1,500.00
Tree, Rem, 19 inch to 36 inch	6	Each	\$ 1,200.00	\$ 7,200.00
Tree, Rem, 6 inch to 18 inch	13	Each	\$ 750.00	\$ 9,750.00
_ Tree, Rem, Less than 6 inch	5	Each	\$ 500.00	\$ 2,500.00
_ Audio Visual Record of Construction Area	1	LSUM	\$ 2,500.00	\$ 2,500.00
Maintenance Gravel	500	TON	\$ 50.00	\$ 25,000.00
TOTAL COST				\$ 1,236,599.00
CONSTRUCTION COST				\$ 1,236,599.00
Design Engineering (5.4%)				\$ 66,780.00
Construction Engineering (15%)				\$ 185,490.00
Material Testing (1.5%)				\$ 18,550.00
Contingencies (10%)				\$ 123,660.00
TOTAL COST				\$ 1,631,079.00

NOTE:

Design Engineering includes topographical survey, design and preparation of bid documents.

Construction Engineering includes contract administration, construction observation and staking services.



ANDERSON, ECKSTEIN & WESTRICK, INC.
 51301 Schoenherr Road
 Shelby Township, MI 48315
 Phone: 586-726-1234
 Fax No: 586-726-8780

PROJECT: Water Asset Management Report Updates
 Amherst Road - Woodward to End

OWNER: City of Pleasant Ridge

PREPARED BY: Nicholas P. Todino
 DATE: 2/4/2020

CHECKED BY: Michael D. Smith, PE
 DATE: 2/5/2020

PRELIMINARY ESTIMATE

AEW PROJECT NO. 0175-0120

WORK ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
Water Main				
_ Water Main Abandon, 6 inch	2050	FT	\$ 8.00	\$ 16,400.00
_ Fire Hydrant, Assembly	4	Each	\$ 5,000.00	\$ 20,000.00
Fire Hydrant, Rem	4	Each	\$ 675.00	\$ 2,700.00
Gate Valve and Well, 8 inch	4	Each	\$ 6,200.00	\$ 24,800.00
_ Gate Valve and Well, Rem	4	Each	\$ 1,000.00	\$ 4,000.00
_ Water Main, C900 PVC, 8 inch, Directional Drill	2050	FT	\$ 160.00	\$ 328,000.00
_ Water Main Connection, 6 inch	1	Each	\$ 3,500.00	\$ 3,500.00
_ Water Main Connection, 12 inch	1	Each	\$ 6,000.00	\$ 6,000.00
Water Service (WM to Valve Box)	33	Each	\$ 900.00	\$ 29,700.00
Water Service, Long (WM to Valve Box)	43	Each	\$ 1,900.00	\$ 81,700.00
_ Water Service, Special	76	Each	\$ 4,500.00	\$ 342,000.00
_ Mismarked Water Services	16	Hrs	\$ 350.00	\$ 5,600.00
Pavement				
Pavt Repr, Rem	83	Syd	\$ 10.00	\$ 830.00
Pavt Repr, Nonreinf Conc, 8 inch	83	Syd	\$ 90.00	\$ 7,470.00
Curb and Gutter, Rem	74	FT	\$ 10.00	\$ 740.00
_ Curb and Gutter, Conc, Det F4, Modified	74	FT	\$ 25.00	\$ 1,850.00
Sidewalk, Rem	609	Syd	\$ 9.00	\$ 5,481.00
Sidewalk, Conc, 4 inch	5042	Sft	\$ 6.00	\$ 30,252.00
Sidewalk Ramp, Conc, 8 inch	432	Sft	\$ 9.50	\$ 4,104.00
Aggregate Base, 6 inch	447	Syd	\$ 10.00	\$ 4,470.00
_ Driveway, Rem	347	Syd	\$ 11.00	\$ 3,817.00
Driveway, Nonreinf Conc, 8 inch	347	Syd	\$ 60.00	\$ 20,820.00
Soil Erosion				
_ Erosion Control, Inlet Filter	10	Each	\$ 175.00	\$ 1,750.00
_ Turf Establishment	1	LSUM	\$ 10,000.00	\$ 10,000.00
MISC Work				
Mobilization, Max 8%	1	LSUM	\$ 80,670.00	\$ 80,670.00
_ Traffic Control & Maintenance	1	LSUM	\$ 5,000.00	\$ 5,000.00
_ Permitting Allowance	1	LSUM	\$ 1,500.00	\$ 1,500.00
Tree, Rem, 19 inch to 36 inch	2	Each	\$ 1,200.00	\$ 2,400.00
Tree, Rem, 6 inch to 18 inch	18	Each	\$ 750.00	\$ 13,500.00
_ Tree, Rem, Less than 6 inch	5	Each	\$ 500.00	\$ 2,500.00
_ Audio Visual Record of Construction Area	1	LSUM	\$ 2,500.00	\$ 2,500.00
Maintenance Gravel	500	TON	\$ 50.00	\$ 25,000.00
TOTAL COST				\$ 1,089,054.00
CONSTRUCTION COST				\$ 1,089,054.00
Design Engineering (5.8%)				\$ 63,170.00
Construction Engineering (15%)				\$ 163,360.00
Material Teasing (1.5%)				\$ 16,340.00
Contingencies (10%)				\$ 108,910.00
TOTAL COST				\$ 1,440,834.00

NOTE:

Design Engineering includes topographical survey, design and preparation of bid documents.

Construction Engineering includes contract administration, construction observation and staking services.



ANDERSON, ECKSTEIN & WESTRICK, INC.
 51301 Schoenherr Road
 Shelby Township, MI 48315
 Phone: 586-726-1234
 Fax No: 586-726-8780

PROJECT: Water Asset Management Report Updates
 Maywood Ave. - Woodward to End

OWNER: City of Pleasant Ridge

PREPARED BY: Nicholas P. Todino
 DATE: 2/4/2020

CHECKED BY: Michael D. Smith, PE
 DATE: 2/5/2020

PRELIMINARY ESTIMATE

AEW PROJECT NO. 0175-0120

WORK ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<u>Water Main</u>				
_ Water Main Abandon, 6 inch	2060	FT	\$ 8.00	\$ 16,480.00
_ Fire Hydrant, Assembly	3	Each	\$ 5,000.00	\$ 15,000.00
Fire Hydrant, Rem	3	Each	\$ 675.00	\$ 2,025.00
Gate Valve and Well, 8 inch	3	Each	\$ 6,200.00	\$ 18,600.00
_ Gate Valve and Well, Rem	3	Each	\$ 1,000.00	\$ 3,000.00
_ Water Main, C900 PVC, 8 inch, Directional Drill	2060	FT	\$ 160.00	\$ 329,600.00
_ Water Main Connection, 6 inch	1	Each	\$ 3,500.00	\$ 3,500.00
_ Water Main Connection, 10 inch	1	Each	\$ 5,500.00	\$ 5,500.00
Water Service (WM to Valve Box)	34	Each	\$ 900.00	\$ 30,600.00
Water Service, Long (WM to Valve Box)	35	Each	\$ 1,900.00	\$ 66,500.00
_ Water Service, Special	69	Each	\$ 4,500.00	\$ 310,500.00
_ Mismarked Water Services	16	Hrs	\$ 350.00	\$ 5,600.00
<u>Pavement</u>				
Pavt Repr, Rem	382	Syd	\$ 10.00	\$ 3,820.00
Pavt Repr, Nonreinf Conc, 8 inch	382	Syd	\$ 90.00	\$ 34,380.00
Curb and Gutter, Rem	464	FT	\$ 10.00	\$ 4,640.00
_ Curb and Gutter, Conc, Det F4, Modified	464	FT	\$ 25.00	\$ 11,600.00
Sidewalk, Rem	610	Syd	\$ 9.00	\$ 5,490.00
Sidewalk, Conc, 4 inch	4860	Sft	\$ 6.00	\$ 29,160.00
Sidewalk Ramp, Conc, 8 inch	630	Sft	\$ 9.50	\$ 5,985.00
Aggregate Base, 6 inch	898	Syd	\$ 10.00	\$ 8,980.00
_ Driveway, Rem	413	Syd	\$ 11.00	\$ 4,543.00
Driveway, Nonreinf Conc, 8 inch	413	Syd	\$ 60.00	\$ 24,780.00
<u>Soil Erosion</u>				
_ Erosion Control, Inlet Filter	9	Each	\$ 175.00	\$ 1,575.00
_ Turf Establishment	1	LSUM	\$ 10,000.00	\$ 10,000.00
<u>MISC Work</u>				
Mobilization, Max 8%	1	LSUM	\$ 80,640.00	\$ 80,640.00
_ Traffic Control & Maintenance	1	LSUM	\$ 5,000.00	\$ 5,000.00
_ Permitting Allowance	1	LSUM	\$ 1,500.00	\$ 1,500.00
Tree, Rem, 19 inch to 36 inch	2	Each	\$ 1,200.00	\$ 2,400.00
Tree, Rem, 6 inch to 18 inch	23	Each	\$ 750.00	\$ 17,250.00
_ Tree, Rem, Less than 6 inch	5	Each	\$ 500.00	\$ 2,500.00
_ Audio Visual Record of Construction Area	1	LSUM	\$ 2,500.00	\$ 2,500.00
Maintenance Gravel	500	TON	\$ 50.00	\$ 25,000.00
TOTAL COST				\$ 1,088,648.00
CONSTRUCTION COST				\$ 1,088,648.00
Design Engineering (5.7%)				\$ 62,050.00
Construction Engineering (15%)				\$ 163,300.00
Material Teasing (1.5%)				\$ 16,330.00
Contingencies (10%)				\$ 108,860.00
TOTAL COST				\$ 1,439,188.00

NOTE:

Design Engineering includes topographical survey, design and preparation of bid documents.

Construction Engineering includes contract administration, construction observation and staking services.



ANDERSON, ECKSTEIN & WESTRICK, INC.
 51301 Schoenherr Road
 Shelby Township, MI 48315
 Phone: 586-726-1234
 Fax No: 586-726-8780

PRELIMINARY ESTIMATE

AEW PROJECT NO. 0175-0120

PROJECT: Water Asset Management Report Updates
 Sylvan Ave. - Woodward to End

OWNER: City of Pleasant Ridge

PREPARED BY: Nicholas P. Todino
 DATE: 2/4/2020

CHECKED BY: Michael D. Smith, PE
 DATE: 2/5/2020

WORK ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<u>Water Main</u>				
_ Water Main Abandon, 6 inch	2000	FT	\$ 8.00	\$ 16,000.00
_ Fire Hydrant, Assembly	3	Each	\$ 5,000.00	\$ 15,000.00
Fire Hydrant, Rem	3	Each	\$ 675.00	\$ 2,025.00
Gate Valve and Well, 8 inch	3	Each	\$ 6,200.00	\$ 18,600.00
_ Gate Valve and Well, Rem	3	Each	\$ 1,000.00	\$ 3,000.00
_ Water Main, C900 PVC, 8 inch, Directional Drill	2000	FT	\$ 160.00	\$ 320,000.00
_ Water Main Connection, 6 inch	1	Each	\$ 3,500.00	\$ 3,500.00
_ Water Main Connection, 10 inch	1	Each	\$ 5,500.00	\$ 5,500.00
Water Service (WM to Valve Box)	35	Each	\$ 900.00	\$ 31,500.00
Water Service, Long (WM to Valve Box)	34	Each	\$ 1,900.00	\$ 64,600.00
_ Water Service, Special	69	Each	\$ 4,500.00	\$ 310,500.00
_ Mismarked Water Services	16	Hrs	\$ 350.00	\$ 5,600.00
<u>Pavement</u>				
Pavt Repr, Rem	394	Syd	\$ 10.00	\$ 3,940.00
Pavt Repr, Nonreinf Conc, 8 inch	394	Syd	\$ 90.00	\$ 35,460.00
Curb and Gutter, Rem	474	FT	\$ 10.00	\$ 4,740.00
_ Curb and Gutter, Conc, Det F4, Modified	474	FT	\$ 25.00	\$ 11,850.00
Sidewalk, Rem	584	Syd	\$ 9.00	\$ 5,256.00
Sidewalk, Conc, 4 inch	4605	Sft	\$ 6.00	\$ 27,630.00
Sidewalk Ramp, Conc, 8 inch	645	Sft	\$ 9.50	\$ 6,127.50
Aggregate Base, 6 inch	487	Syd	\$ 10.00	\$ 4,870.00
_ Driveway, Rem	347	Syd	\$ 11.00	\$ 3,817.00
Driveway, Nonreinf Conc, 8 inch	347	Syd	\$ 60.00	\$ 20,820.00
<u>Soil Erosion</u>				
_ Erosion Control, Inlet Filter	11	Each	\$ 175.00	\$ 1,925.00
_ Turf Establishment	1	LSUM	\$ 10,000.00	\$ 10,000.00
<u>MISC Work</u>				
Mobilization, Max 8%	1	LSUM	\$ 78,540.00	\$ 78,540.00
_ Traffic Control & Maintenance	1	LSUM	\$ 5,000.00	\$ 5,000.00
_ Permitting Allowance	1	LSUM	\$ 1,500.00	\$ 1,500.00
Tree, Rem, 19 inch to 36 inch	1	Each	\$ 1,200.00	\$ 1,200.00
Tree, Rem, 6 inch to 18 inch	15	Each	\$ 750.00	\$ 11,250.00
_ Tree, Rem, Less than 6 inch	6	Each	\$ 500.00	\$ 3,000.00
_ Audio Visual Record of Construction Area	1	LSUM	\$ 2,500.00	\$ 2,500.00
Maintenance Gravel	500	TON	\$ 50.00	\$ 25,000.00
TOTAL COST				\$ 1,060,250.50
CONSTRUCTION COST				\$ 1,060,250.50
Design Engineering (5.8%)				\$ 61,490.00
Construction Engineering (15%)				\$ 159,040.00
Material Testing (1.5%)				\$ 15,900.00
Contingencies (10%)				\$ 106,030.00
TOTAL COST				\$ 1,402,710.50

NOTE:

Design Engineering includes topographical survey, design and preparation of bid documents.

Construction Engineering includes contract administration, construction observation and staking services.



ANDERSON, ECKSTEIN & WESTRICK, INC.
 51301 Schoenherr Road
 Shelby Township, MI 48315
 Phone: 586-726-1234
 Fax No: 586-726-8780

PRELIMINARY ESTIMATE

AEW PROJECT NO. 0175-0120

PROJECT: Water Asset Management Report Updates
 Fairwood Blvd. - Woodward to End

OWNER: City of Pleasant Ridge

PREPARED BY: Nicholas P. Todino
 DATE: 2/4/2020

CHECKED BY: Michael D. Smith, PE
 DATE: 2/5/2020

WORK ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
Water Main				
_ Water Main Abandon, 6 inch	1970	FT	\$ 8.00	\$ 15,760.00
_ Fire Hydrant, Assembly	3	Each	\$ 5,000.00	\$ 15,000.00
Fire Hydrant, Rem	3	Each	\$ 675.00	\$ 2,025.00
Gate Valve and Well, 8 inch	4	Each	\$ 6,200.00	\$ 24,800.00
_ Gate Valve and Well, Rem	4	Each	\$ 1,000.00	\$ 4,000.00
_ Water Main, C900 PVC, 8 inch, Directional Drill	1970	FT	\$ 160.00	\$ 315,200.00
_ Water Main Connection, 6 inch	1	Each	\$ 3,500.00	\$ 3,500.00
_ Water Main Connection, 10 inch	1	Each	\$ 5,500.00	\$ 5,500.00
Water Service (WM to Valve Box)	32	Each	\$ 900.00	\$ 28,800.00
Water Service, Long (WM to Valve Box)	32	Each	\$ 1,900.00	\$ 60,800.00
_ Water Service, Special	64	Each	\$ 4,500.00	\$ 288,000.00
_ Mismarked Water Services	16	Hrs	\$ 350.00	\$ 5,600.00
Pavement				
Pavt Repr, Rem	359	Syd	\$ 10.00	\$ 3,590.00
Pavt Repr, Nonreinf Conc, 8 inch	359	Syd	\$ 90.00	\$ 32,310.00
Curb and Gutter, Rem	50	FT	\$ 10.00	\$ 500.00
_ Curb and Gutter, Conc, Det F4, Modified	50	FT	\$ 25.00	\$ 1,250.00
Sidewalk, Rem	962	Syd	\$ 9.00	\$ 8,658.00
Sidewalk, Conc, 4 inch	4326	Sft	\$ 6.00	\$ 25,956.00
Sidewalk Ramp, Conc, 8 inch	552	Sft	\$ 9.50	\$ 5,244.00
Aggregate Base, 6 inch	670	Syd	\$ 10.00	\$ 6,700.00
_ Driveway, Rem	299	Syd	\$ 11.00	\$ 3,289.00
Driveway, Nonreinf Conc, 8 inch	299	Syd	\$ 60.00	\$ 17,940.00
Soil Erosion				
_ Erosion Control, Inlet Filter	20	Each	\$ 175.00	\$ 3,500.00
_ Turf Establishment	1	LSUM	\$ 10,000.00	\$ 10,000.00
MISC Work				
Mobilization, Max 8%	1	LSUM	\$ 75,240.00	\$ 75,240.00
_ Traffic Control & Maintenance	1	LSUM	\$ 5,000.00	\$ 5,000.00
_ Permitting Allowance	1	LSUM	\$ 1,500.00	\$ 1,500.00
Tree, Rem, 19 inch to 36 inch	4	Each	\$ 1,200.00	\$ 4,800.00
Tree, Rem, 6 inch to 18 inch	13	Each	\$ 750.00	\$ 9,750.00
_ Tree, Rem, Less than 6 inch	8	Each	\$ 500.00	\$ 4,000.00
_ Audio Visual Record of Construction Area	1	LSUM	\$ 2,500.00	\$ 2,500.00
Maintenance Gravel	500	TON	\$ 50.00	\$ 25,000.00
TOTAL COST				\$ 1,015,712.00
CONSTRUCTION COST				\$ 1,015,712.00
Design Engineering (6.2%)				\$ 62,970.00
Construction Engineering (15%)				\$ 152,360.00
Material Testing (1.5%)				\$ 15,240.00
Contingencies (10%)				\$ 101,570.00
TOTAL COST				\$ 1,347,852.00

NOTE:

Design Engineering includes topographical survey, design and preparation of bid documents.

Construction Engineering includes contract administration, construction observation and staking services.



ANDERSON, ECKSTEIN & WESTRICK, INC.
 51301 Schoenherr Road
 Shelby Township, MI 48315
 Phone: 586-726-1234
 Fax No: 586-726-8780

PROJECT: Water Asset Management Report Updates
 Woodward Heights Blvd. -
 Woodward to East Side
OWNER: City of Pleasant Ridge

PREPARED BY: Nicholas P. Todino
DATE: 2/4/2020

CHECKED BY: Michael D. Smith, PE
DATE: 2/5/2020

PRELIMINARY ESTIMATE

AEW PROJECT NO. 0175-0120

WORK ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
Water Main				
_ Water Main Abandon, 6 inch	1900	FT	\$ 8.00	\$ 15,200.00
_ Fire Hydrant, Assembly	2	Each	\$ 5,000.00	\$ 10,000.00
Fire Hydrant, Rem	2	Each	\$ 675.00	\$ 1,350.00
Gate Valve and Well, 8 inch	2	Each	\$ 6,200.00	\$ 12,400.00
_ Gate Valve and Well, Rem	2	Each	\$ 1,000.00	\$ 2,000.00
_ Water Main, C900 PVC, 8 inch, Directional Drill	1900	FT	\$ 160.00	\$ 304,000.00
_ Water Main Connection, 6 inch	1	Each	\$ 3,500.00	\$ 3,500.00
_ Water Main Connection, 10 inch	1	Each	\$ 5,500.00	\$ 5,500.00
Water Service (WM to Valve Box)	30	Each	\$ 900.00	\$ 27,000.00
Water Service, Long (WM to Valve Box)	37	Each	\$ 1,900.00	\$ 70,300.00
_ Water Service, Special	67	Each	\$ 4,500.00	\$ 301,500.00
_ Mismarked Water Services	16	Hrs	\$ 350.00	\$ 5,600.00
Pavement				
Pavt Repr, Rem	206	Syd	\$ 10.00	\$ 2,060.00
Pavt Repr, Nonreinf Conc, 8 inch	206	Syd	\$ 90.00	\$ 18,540.00
Curb and Gutter, Rem	442	FT	\$ 10.00	\$ 4,420.00
_ Curb and Gutter, Conc, Det F4, Modified	442	FT	\$ 25.00	\$ 11,050.00
Sidewalk, Rem	516	Syd	\$ 9.00	\$ 4,644.00
Sidewalk, Conc, 4 inch	4435	Sft	\$ 6.00	\$ 26,610.00
Sidewalk Ramp, Conc, 8 inch	206	Sft	\$ 9.50	\$ 1,957.00
Aggregate Base, 6 inch	518	Syd	\$ 10.00	\$ 5,180.00
_ Driveway, Rem	213	Syd	\$ 11.00	\$ 2,343.00
Driveway, Nonreinf Conc, 8 inch	213	Syd	\$ 60.00	\$ 12,780.00
Soil Erosion				
_ Erosion Control, Inlet Filter	14	Each	\$ 175.00	\$ 2,450.00
_ Turf Establishment	1	LSUM	\$ 10,000.00	\$ 10,000.00
MISC Work				
Mobilization, Max 8%	1	LSUM	\$ 72,860.00	\$ 72,860.00
_ Traffic Control & Maintenance	1	LSUM	\$ 5,000.00	\$ 5,000.00
_ Permitting Allowance	1	LSUM	\$ 1,500.00	\$ 1,500.00
Tree, Rem, 19 inch to 36 inch	3	Each	\$ 1,200.00	\$ 3,600.00
Tree, Rem, 6 inch to 18 inch	13	Each	\$ 750.00	\$ 9,750.00
_ Tree, Rem, Less than 6 inch	6	Each	\$ 500.00	\$ 3,000.00
_ Audio Visual Record of Construction Area	1	LSUM	\$ 2,500.00	\$ 2,500.00
Maintenance Gravel	500	TON	\$ 50.00	\$ 25,000.00
			TOTAL COST	\$ 983,594.00
CONSTRUCTION COST				\$ 983,594.00
Design Engineering (6.2%)				\$ 60,980.00
Construction Engineering (15%)				\$ 147,540.00
Material Testing (1.5%)				\$ 14,750.00
Contingencies (10%)				\$ 98,360.00
TOTAL COST				\$ 1,305,224.00

NOTE:

Design Engineering includes topographical survey, design and preparation of bid documents.

Construction Engineering includes contract administration, construction observation and staking services.



ANDERSON, ECKSTEIN & WESTRICK, INC.
 51301 Schoenherr Road
 Shelby Township, MI 48315
 Phone: 586-726-1234
 Fax No: 586-726-8780

PRELIMINARY ESTIMATE

AEW PROJECT NO. 0175-0120

PROJECT: Water Asset Management Report Updates
 Gainsborough Ave. and along railroad tracks

OWNER: City of Pleasant Ridge

PREPARED BY: Nicholas P. Todino

DATE: 2/4/2020

CHECKED BY: Michael D. Smith, PE

DATE: 2/5/2020

WORK ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
-----------	----------	------	------------	--------

Water Main

_ Water Main Abandon, 6 inch	2000	FT	\$ 8.00	\$ 16,000.00
Gate Valve and Well, 8 inch	5	Each	\$ 6,200.00	\$ 31,000.00
_ Gate Valve and Well, Rem	5	Each	\$ 1,000.00	\$ 5,000.00
_ Water Main, C900 PVC, 8 inch, Directional Drill	2000	FT	\$ 160.00	\$ 320,000.00
_ Water Main Connection, 6 inch	7	Each	\$ 3,500.00	\$ 24,500.00
Water Service, Long (WM to Valve Box)	5	Each	\$ 1,900.00	\$ 9,500.00
_ Water Service, Special	5	Each	\$ 4,500.00	\$ 22,500.00
_ Mismarked Water Services	16	Hrs	\$ 350.00	\$ 5,600.00

Pavement

Pavt Repr, Rem	110	Syd	\$ 10.00	\$ 1,100.00
Pavt Repr, Nonreinf Conc, 8 inch	110	Syd	\$ 90.00	\$ 9,900.00
Curb and Gutter, Rem	100	FT	\$ 10.00	\$ 1,000.00
_ Curb and Gutter, Conc, Det F4, Modified	100	FT	\$ 25.00	\$ 2,500.00
Sidewalk, Rem	50	Syd	\$ 9.00	\$ 450.00
Sidewalk, Conc, 4 inch	450	Sft	\$ 6.00	\$ 2,700.00
Aggregate Base, 6 inch	180	Syd	\$ 10.00	\$ 1,800.00
_ Driveway, Rem	50	Syd	\$ 11.00	\$ 550.00
Driveway, Nonreinf Conc, 8 inch	50	Syd	\$ 60.00	\$ 3,000.00

Soil Erosion

_ Erosion Control, Inlet Filter	7	Each	\$ 175.00	\$ 1,225.00
_ Turf Establishment	1	LSUM	\$ 10,000.00	\$ 10,000.00

MISC Work

Mobilization, Max 8%	1	LSUM	\$ 40,870.00	\$ 40,870.00
_ Traffic Control & Maintainance	1	LSUM	\$ 5,000.00	\$ 5,000.00
_ Permitting Allowance	1	LSUM	\$ 1,500.00	\$ 1,500.00
Tree, Rem, 19 inch to 36 inch	5	Each	\$ 1,200.00	\$ 6,000.00
Tree, Rem, 6 inch to 18 inch	20	Each	\$ 750.00	\$ 15,000.00
_ Tree, Rem, Less than 6 inch	5	Each	\$ 500.00	\$ 2,500.00
_ Audio Visual Record of Construction Area	1	LSUM	\$ 2,500.00	\$ 2,500.00
Maintenance Gravel	200	TON	\$ 50.00	\$ 10,000.00

TOTAL COST \$ 551,695.00

CONSTRUCTION COST	\$ 551,695.00
Design Engineering (6.9%)	\$ 38,070.00
Construction Engineering (15%)	\$ 82,750.00
Material Testing (1.5%)	\$ 8,280.00
Contingencies (10%)	\$ 55,170.00
TOTAL COST	\$ 735,965.00

NOTE:

Design Engineering includes topographical survey, design and preparation of bid documents.

Construction Engineering includes contract administration, construction observation and staking services.



ANDERSON, ECKSTEIN & WESTRICK, INC.
 51301 Schoenherr Road
 Shelby Township, MI 48315
 Phone: 586-726-1234
 Fax No: 586-726-8780

PRELIMINARY ESTIMATE

AEW PROJECT NO. 0175-0120

PROJECT: Water Asset Management Report Updates
 Woodward - West Side

OWNER: City of Pleasant Ridge

PREPARED BY: Nicholas P. Todino
 DATE: 2/4/2020

CHECKED BY: Michael D. Smith, PE
 DATE: 2/5/2020

WORK ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
Water Main				
_ Water Main Abandon, 6 inch	79	FT	\$ 8.00	\$ 632.00
_ Water Main Abandon, 10 inch	694	FT	\$ 11.00	\$ 7,634.00
_ Fire Hydrant, Assembly	3	Each	\$ 5,000.00	\$ 15,000.00
Fire Hydrant, Rem	3	Each	\$ 675.00	\$ 2,025.00
Gate Valve and Well, 8 inch	5	Each	\$ 6,200.00	\$ 31,000.00
_ Gate Valve and Well, Rem	5	Each	\$ 1,000.00	\$ 5,000.00
_ Water Main, C900 PVC, 12 inch, Directional Drill	773	FT	\$ 200.00	\$ 154,600.00
_ Water Main Connection, 6 inch	2	Each	\$ 3,500.00	\$ 7,000.00
_ Water Main Connection, 10 inch	2	Each	\$ 5,500.00	\$ 11,000.00
Water Service (WM to Valve Box)	6	Each	\$ 900.00	\$ 5,400.00
Water Service, Long (WM to Valve Box)	4	Each	\$ 1,900.00	\$ 7,600.00
_ Water Service, Special	10	Each	\$ 4,500.00	\$ 45,000.00
_ Mismarked Water Services	16	Hrs	\$ 350.00	\$ 5,600.00
Pavement				
Pavt Repr, Rem	92	Syd	\$ 10.00	\$ 920.00
Pavt Repr, Nonreinf Conc, 8 inch	92	Syd	\$ 90.00	\$ 8,280.00
Curb and Gutter, Rem	86	FT	\$ 10.00	\$ 860.00
_ Curb and Gutter, Conc, Det F4, Modified	86	FT	\$ 25.00	\$ 2,150.00
Sidewalk, Rem	67	Syd	\$ 9.00	\$ 603.00
Sidewalk, Conc, 4 inch	600	Sft	\$ 6.00	\$ 3,600.00
Sidewalk Ramp, Conc, 8 inch	300	Sft	\$ 9.50	\$ 2,850.00
Aggregate Base, 6 inch	202	Syd	\$ 10.00	\$ 2,020.00
_ Driveway, Rem	90	Syd	\$ 11.00	\$ 990.00
Driveway, Nonreinf Conc, 8 inch	90	Syd	\$ 60.00	\$ 5,400.00
Soil Erosion				
_ Erosion Control, Inlet Filter	6	Each	\$ 175.00	\$ 1,050.00
_ Turf Establishment	1	LSUM	\$ 10,000.00	\$ 10,000.00
MISC Work				
Mobilization, Max 8%	1	LSUM	\$ 29,190.00	\$ 29,190.00
_ Traffic Control & Maintainance	1	LSUM	\$ 5,000.00	\$ 5,000.00
_ Permitting Allowance	1	LSUM	\$ 1,500.00	\$ 1,500.00
Tree, Rem, 19 inch to 36 inch	1	Each	\$ 1,200.00	\$ 1,200.00
Tree, Rem, 6 inch to 18 inch	4	Each	\$ 750.00	\$ 3,000.00
_ Tree, Rem, Less than 6 inch	1	Each	\$ 500.00	\$ 500.00
_ Audio Visual Record of Construction Area	1	LSUM	\$ 2,500.00	\$ 2,500.00
Maintenance Gravel	300	TON	\$ 50.00	\$ 15,000.00
TOTAL COST				\$ 394,104.00
CONSTRUCTION COST				\$ 394,104.00
Design Engineering (10.2%)				\$ 40,200.00
Construction Engineering (15%)				\$ 59,120.00
Material Testing (1.5%)				\$ (5,910.00)
Contingencies (10%)				\$ 39,410.00
TOTAL COST				\$ 526,924.00
NOTE:				
Design Engineering includes topographical survey, design and preparation of bid documents.				
Construction Engineering includes contract administration, construction observation and staking services.				



ANDERSON, ECKSTEIN & WESTRICK, INC.
 51301 Schoenherr Road
 Shelby Township, MI 48315
 Phone: 586-726-1234
 Fax No: 586-726-8780

PRELIMINARY ESTIMATE

AEW PROJECT NO. 0175-0120

PROJECT: Water Asset Management Report Updates
 Woodward - East Side

OWNER: City of Pleasant Ridge

PREPARED BY: Nicholas P. Todino
 DATE: 2/4/2020

CHECKED BY: Michael D. Smith, PE
 DATE: 2/5/2020

WORK ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
Water Main				
_ Water Main Abandon, 10 inch	2040	FT	\$ 11.00	\$ 22,440.00
_ Water Main Abandon, 12 inch	1189	FT	\$ 12.00	\$ 14,268.00
_ Fire Hydrant, Assembly	7	Each	\$ 5,000.00	\$ 35,000.00
Fire Hydrant, Rem	7	Each	\$ 675.00	\$ 4,725.00
Gate Valve and Well, 8 inch	11	Each	\$ 6,200.00	\$ 68,200.00
_ Gate Valve and Well, Rem	11	Each	\$ 1,000.00	\$ 11,000.00
_ Water Main, C900 PVC, 12 inch, Directional Drill	3229	FT	\$ 200.00	\$ 645,800.00
_ Water Main Connection, 6 inch	9	Each	\$ 3,500.00	\$ 31,500.00
_ Water Main Connection, 10 inch	2	Each	\$ 5,500.00	\$ 11,000.00
_ Water Main Connection, 48 inch	1	Each	\$ 30,000.00	\$ 30,000.00
Water Service (WM to Valve Box)	22	Each	\$ 900.00	\$ 19,800.00
_ Water Service, Special	22	Each	\$ 4,500.00	\$ 99,000.00
_ Mismarked Water Services	16	Hrs	\$ 350.00	\$ 5,600.00
Pavement				
Pavt Repr, Rem	242	Syd	\$ 10.00	\$ 2,420.00
Pavt Repr, Nonreinf Conc, 8 inch	242	Syd	\$ 90.00	\$ 21,780.00
Curb and Gutter, Rem	242	FT	\$ 10.00	\$ 2,420.00
_ Curb and Gutter, Conc, Det F4, Modified	242	FT	\$ 25.00	\$ 6,050.00
Sidewalk, Rem	273	Syd	\$ 9.00	\$ 2,457.00
Sidewalk, Conc, 4 inch	1100	Sft	\$ 6.00	\$ 6,600.00
Sidewalk Ramp, Conc, 8 inch	1350	Sft	\$ 9.50	\$ 12,825.00
Aggregate Base, 6 inch	474	Syd	\$ 10.00	\$ 4,740.00
_ Driveway, Rem	178	Syd	\$ 11.00	\$ 1,958.00
Driveway, Nonreinf Conc, 8 inch	178	Syd	\$ 60.00	\$ 10,680.00
Soil Erosion				
_ Erosion Control, Inlet Filter	20	Each	\$ 175.00	\$ 3,500.00
_ Turf Establishment	1	LSUM	\$ 10,000.00	\$ 10,000.00
MISC Work				
Mobilization, Max 8%	1	LSUM	\$ 89,240.00	\$ 89,240.00
_ Traffic Control & Maintainance	1	LSUM	\$ 5,000.00	\$ 5,000.00
_ Permitting Allowance	1	LSUM	\$ 1,500.00	\$ 1,500.00
Tree, Rem, 19 inch to 36 inch	1	Each	\$ 1,200.00	\$ 1,200.00
Tree, Rem, 6 inch to 18 inch	8	Each	\$ 750.00	\$ 6,000.00
_ Tree, Rem, Less than 6 inch	1	Each	\$ 500.00	\$ 500.00
_ Audio Visual Record of Construction Area	1	LSUM	\$ 2,500.00	\$ 2,500.00
Maintenance Gravel	300	TON	\$ 50.00	\$ 15,000.00
TOTAL COST				\$ 1,204,703.00
CONSTRUCTION COST				\$ 1,204,703.00
Design Engineering (5.5%)				\$ 66,260.00
Construction Engineering (15%)				\$ 180,710.00
Material Testing (1.5%)				\$ 18,070.00
Contingencies (10%)				\$ 120,470.00
TOTAL COST				\$ 1,590,213.00
NOTE:				
Design Engineering includes topographical survey, design and preparation of bid documents.				
Construction Engineering includes contract administration, construction observation and staking services.				



ANDERSON, ECKSTEIN & WESTRICK, INC.
 51301 Schoenherr Road
 Shelby Township, MI 48315
 Phone: 586-726-1234
 Fax No: 586-726-8780

PRELIMINARY ESTIMATE

AEW PROJECT NO. 0175-0120

PROJECT: Water Asset Management Report Updates
 West 10 mile Road - West side to Woodward

OWNER: City of Pleasant Ridge

PREPARED BY: Nicholas P. Todino

DATE: 2/4/2020

CHECKED BY: Michael D. Smith, PE

DATE: 2/5/2020

WORK ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
Water Main				
_ Water Main Abandon, 12 inch	2680	FT	\$ 12.00	\$ 32,160.00
_ Fire Hydrant, Assembly	5	Each	\$ 5,000.00	\$ 25,000.00
Fire Hydrant, Rem	5	Each	\$ 675.00	\$ 3,375.00
Gate Valve and Well, 8 inch	5	Each	\$ 6,200.00	\$ 31,000.00
_ Gate Valve and Well, Rem	5	Each	\$ 1,000.00	\$ 5,000.00
_ Water Main, C900 PVC, 8 inch, Directional Drill	2680	FT	\$ 160.00	\$ 428,800.00
_ Water Main Connection, 6 inch	1	Each	\$ 3,500.00	\$ 3,500.00
_ Water Main Connection, 8 inch	1	Each	\$ 4,500.00	\$ 4,500.00
_ Water Main Connection, 10 inch	1	Each	\$ 5,500.00	\$ 5,500.00
_ Water Main Connection, 48 inch	1	Each	\$ 30,000.00	\$ 30,000.00
_ Mismarked Water Services	16	Hrs	\$ 350.00	\$ 5,600.00
Pavement				
Pavt Repr, Rem	78	Syd	\$ 10.00	\$ 780.00
Pavt Repr, Nonreinf Conc, 8 inch	78	Syd	\$ 90.00	\$ 7,020.00
Curb and Gutter, Rem	70	FT	\$ 10.00	\$ 700.00
_ Curb and Gutter, Conc, Det F4, Modified	70	FT	\$ 25.00	\$ 1,750.00
Sidewalk, Rem	124	Syd	\$ 9.00	\$ 1,116.00
Sidewalk, Conc, 4 inch	900	Sft	\$ 6.00	\$ 5,400.00
Sidewalk Ramp, Conc, 8 inch	215	Sft	\$ 9.50	\$ 2,042.50
Aggregate Base, 6 inch	94	Syd	\$ 10.00	\$ 940.00
Soil Erosion				
_ Turf Establishment	1	LSUM	\$ 10,000.00	\$ 10,000.00
MISC Work				
Mobilization, Max 8%	1	LSUM	\$ 49,450.00	\$ 49,450.00
_ Traffic Control & Maintainance	1	LSUM	\$ 5,000.00	\$ 5,000.00
_ Permitting Allowance	1	LSUM	\$ 1,500.00	\$ 1,500.00
Tree, Rem, 19 inch to 36 inch	0	Each	\$ 1,200.00	\$ -
Tree, Rem, 6 inch to 18 inch	0	Each	\$ 750.00	\$ -
_ Tree, Rem, Less than 6 inch	0	Each	\$ 500.00	\$ -
_ Audio Visual Record of Construction Area	1	LSUM	\$ 2,500.00	\$ 2,500.00
Maintenance Gravel	100	TON	\$ 50.00	\$ 5,000.00
			TOTAL COST	\$ 667,633.50
CONSTRUCTION COST				\$ 667,633.50
Design Engineering (6.6%)				\$ 44,060.00
Construction Engineering (15%)				\$ 100,150.00
Materila Testing (1.5%)				\$ 10,010.00
Contingencies (10%)				\$ 66,760.00
TOTAL COST				\$ 888,613.50

NOTE:

Design Engineering includes topographical survey, design and preparation of bid documents.

Construction Engineering includes contract administration, construction observation and staking services.



ANDERSON, ECKSTEIN & WESTRICK, INC.
 51301 Schoenherr Road
 Shelby Township, MI 48315
 Phone: 586-726-1234
 Fax No: 586-726-8780

PRELIMINARY ESTIMATE

AEW PROJECT NO. 0175-0120

PROJECT: Water Asset Management Report Updates
 East 10 mile Road - Woodward to East side

OWNER: City of Pleasant Ridge

PREPARED BY: Nicholas P. Todino

DATE: 2/4/2020

CHECKED BY: Michael D. Smith, PE

DATE: 2/5/2020

WORK ITEM	QUANTITY	UNIT	UNIT PRICE		AMOUNT
Water Main					
_ Water Main Abandon, 6 inch	2800	FT	\$ 8.00	\$	22,400.00
_ Fire Hydrant, Assembly	10	Each	\$ 5,000.00	\$	50,000.00
Fire Hydrant, Rem	10	Each	\$ 675.00	\$	6,750.00
Gate Valve and Well, 8 inch	4	Each	\$ 6,200.00	\$	24,800.00
_ Gate Valve and Well, Rem	4	Each	\$ 1,000.00	\$	4,000.00
_ Water Main, C900 PVC, 8 inch, Directional Drill	2800	FT	\$ 160.00	\$	448,000.00
_ Water Main Connection, 6 inch	4	Each	\$ 3,500.00	\$	14,000.00
_ Water Main Connection, 8 inch	1	Each	\$ 4,500.00	\$	4,500.00
_ Water Main Connection, 10 inch	1	Each	\$ 5,500.00	\$	5,500.00
_ Mismarked Water Services	16	Hrs	\$ 350.00	\$	5,600.00
Pavement					
Pavt Repr, Rem	67	Syd	\$ 10.00	\$	670.00
Pavt Repr, Nonreinf Conc, 8 inch	67	Syd	\$ 90.00	\$	6,030.00
Curb and Gutter, Rem	60	FT	\$ 10.00	\$	600.00
_ Curb and Gutter, Conc, Det F4, Modified	60	FT	\$ 25.00	\$	1,500.00
Sidewalk, Rem	84	Syd	\$ 9.00	\$	756.00
Sidewalk, Conc, 4 inch	400	Sft	\$ 6.00	\$	2,400.00
Sidewalk Ramp, Conc, 8 inch	350	Sft	\$ 9.50	\$	3,325.00
Aggregate Base, 6 inch	81	Syd	\$ 10.00	\$	810.00
Soil Erosion					
_ Turf Establishment	1	LSUM	\$ 10,000.00	\$	10,000.00
MISC Work					
Mobilization, Max 8%	1	LSUM	\$ 50,170.00	\$	50,170.00
_ Traffic Control & Maintenance	1	LSUM	\$ 5,000.00	\$	5,000.00
_ Permitting Allowance	1	LSUM	\$ 1,500.00	\$	1,500.00
Tree, Rem, 6 inch to 18 inch	2	Each	\$ 750.00	\$	1,500.00
_ Audio Visual Record of Construction Area	1	LSUM	\$ 2,500.00	\$	2,500.00
Maintenance Gravel	100	TON	\$ 50.00	\$	5,000.00
			TOTAL COST		\$ 677,311.00
CONSTRUCTION COST				\$	677,311.00
Design Engineering (6.6%)				\$	44,700.00
Construction Engineering (15%)				\$	101,600.00
Material Testing (1.5%)				\$	10,160.00
Contingencies (10%)				\$	67,730.00
TOTAL COST				\$	901,501.00

NOTE:

Design Engineering includes topographical survey, design and preparation of bid documents.

Construction Engineering includes contract administration, construction observation and staking services.



ANDERSON, ECKSTEIN & WESTRICK, INC.
 51301 Schoenherr Road
 Shelby Township, MI 48315
 Phone: 586-726-1234
 Fax No: 586-726-8780

PRELIMINARY ESTIMATE

AEW PROJECT NO. 0175-0120

PROJECT: Water Asset Management Report Updates
 OWNER: City of Pleasant Ridge
 PREPARED BY: Nicholas P. Todino
 DATE: 2/4/2020
 CHECKED BY: Michael D. Smith, PE
 DATE: 2/5/2020

WORK ITEM	TOTAL
Woodside park Blvd. - Oakdale to Ridge	\$ 604,244.00
Kenberton Drive - Oakdale to Ridge	\$ 513,268.00
Elm Park Ave. - Oakdale to Ridge	\$ 553,967.00
Norwich Road - Oakdale to Ridge	\$ 592,796.50
Hanover Road - Oakdale to Ridge	\$ 619,777.00
Cambridge Blvd. - Maplefield to Ridge	\$ 761,467.00
Oakdale Blvd. - W 10 mile to Cambridge	\$ 1,213,538.00
Ridge Road - I696 to South Side	\$ 929,861.50
Poplar Park Blvd. - Ridge to Woodward	\$ 518,521.00
Oakland Park Blvd. - Ridge to Woodward	\$ 704,988.00
Oxford Blvd. - Ridge to Woodward	\$ 862,539.50
Cambridge Blvd. - Oxford to Woodward	\$ 980,266.00
Kensington Blvd. - South Main to End	\$ 1,219,328.00
Devonshire Road - Woodward to End	\$ 1,163,064.00
Wellesley Drive - Woodward to End	\$ 1,236,599.00
Amherst Road - Woodward to End	\$ 1,089,054.00
Maywood Ave. - Woodward to End	\$ 1,088,648.00
Sylvan Ave. - Woodward to End	\$ 1,060,250.50
Fairwood Blvd. - Woodward to End	\$ 1,015,712.00
Woodward Heights Blvd. - Woodward to East Side	\$ 983,594.00
Gainsborough Ave. and along railroad tracks	\$ 551,695.00
Woodward - West Side	\$ 394,104.00
Woodward - East Side	\$ 1,204,703.00
West 10 mile Road - West side to Woodward	\$ 667,633.50
East 10 mile Road - Woodward to East side	\$ 677,311.00
CONSTRUCTION TOTAL	\$ 21,206,929.50



ANDERSON, ECKSTEIN & WESTRICK, INC.
 51301 Schoenherr Road
 Shelby Township, MI 48315
 Phone: 586-726-1234
 Fax No: 586-726-8780

PRELIMINARY ESTIMATE

AEW PROJECT NO. 0175-0120

PROJECT: Water Asset Management Report Updates
 OWNER: City of Pleasant Ridge
 PREPARED BY: Nicholas P. Todino
 DATE: 2/4/2020
 CHECKED BY: Michael D. Smith, PE
 DATE: 2/5/2020

WORK ITEM	TOTAL
Woodside park Blvd. - Oakdale to Ridge	\$ 805,454.00
Kenberton Drive - Oakdale to Ridge	\$ 684,708.00
Elm Park Ave. - Oakdale to Ridge	\$ 738,447.00
Norwich Road - Oakdale to Ridge	\$ 790,196.50
Hanover Road - Oakdale to Ridge	\$ 826,167.00
Cambridge Blvd. - Maplefield to Ridge	\$ 1,012,757.00
Oakdale Blvd. - W 10 mile to Cambridge	\$ 1,600,648.00
Ridge Road - I696 to South Side	\$ 1,234,861.50
Poplar Park Blvd. - Ridge to Woodward	\$ 691,711.00
Oakland Park Blvd. - Ridge to Woodward	\$ 938,338.00
Oxford Blvd. - Ridge to Woodward	\$ 1,146,309.50
Cambridge Blvd. - Oxford to Woodward	\$ 1,301,796.00
Kensington Blvd. - South Main to End	\$ 1,608,288.00
Devonshire Road - Woodward to End	\$ 1,535,254.00
Wellesley Drive - Woodward to End	\$ 1,631,079.00
Amherst Road - Woodward to End	\$ 1,440,834.00
Maywood Ave. - Woodward to End	\$ 1,439,188.00
Sylvan Ave. - Woodward to End	\$ 1,402,710.50
Fairwood Blvd. - Woodward to End	\$ 1,347,852.00
Woodward Heights Blvd. - Woodward to East Side	\$ 1,305,224.00
Gainsborough Ave. and along railroad tracks	\$ 735,965.00
Woodward - West Side	\$ 526,924.00
Woodward - East Side	\$ 1,590,213.00
West 10 mile Road - West side to Woodward	\$ 888,613.50
East 10 mile Road - Woodward to East side	\$ 901,501.00
TOTAL COST	\$ 28,125,039.50