

# Appendix C

## Preliminary Estimate of Probable Cost Summary

Owner:

Plainfield Charter Township

Project Title:

Water System Extension Areas

Date:

January 30, 2020

Project #:

2170602

### Consent Decree Cost Summary

#### Water System Extension Areas

Area No.	Description	Total Estimated Project Cost
1	House Street, Herrington Avenue & Chandler Drive Loop	\$9,158,000
2	Herrington Avenue from 10 Mile Road to Brent Road (Including Brittany Drive & Brent Road)	\$2,014,000
3	Herrington Avenue from Chandler Drive to west of Belmont Avenue (Including Terrie Lynn, Meek Drive, Korben Woods Court, Sprucewood Court & Sprucewood Drive)	\$2,574,000
4	Belmont Avenue from Post Drive to approximately 1000 feet south of Packer Drive (Including Pixley Avenue, Pine Hill Drive, Frond Street, a portion of Van Dam Drive & Wildwood Creek Drive)	\$6,152,000
7	Wolven Avenue, Wellington Ridge & 43 North (Including Windstone Drive, Stoneridge Drive, Bent Tree Ridge, Royal Hannah Drive, Sir Charles Drive, Lady Lauren Drive, Hopewell Drive, Hopewell Court, Elstner Avenue, & 11 Mile Road from Wolven Avenue to US-131)	\$9,933,000
8	Jewell Avenue from 10 Mile Road to 11 Mile Road (Including 10 Mile Road and 11 Mile Road from Jewell Avenue to Algoma Avenue, Algoma Avenue from 10 Mile Road to 11 Mile Road, Algoma Woods Drive, Point High Drive, Hidden Timbers Drive, Green Timbers, Clearwater Court, Winding Ridge Trail, Oakwood Trail, Booth Bay Development, & Garden Gate Development)	\$12,530,000
9	10 Mile Road & Pine Island Drive Loop (Including Squirewood Drive, Freska Pines, Wateredge Drive & Freska Lake Drive)	\$8,297,000
10	Rogue River Drive (Pvt.)	\$611,000
13	Packer Drive Loop	\$4,451,000
16	Miscellaneous Water Service Locations with Existing Water Main Along Parcel Frontage	\$2,444,000
17	Laurentian Court	\$678,000
18	Rogue Ridge Drive (Pvt.)	\$445,000

## Preliminary Estimate of Probable Cost Summary

Owner:

Plainfield Charter Township

Project Title:

Water System Extension Areas

Date:

January 30, 2020

Project #:

2170602

### Consent Decree Cost Summary

#### Water System Extension Areas

<i>Description</i>	<i>Total Estimated Project Cost</i>
Transmission Improvements (Project Scope to be Determined)	\$2,713,000
<b>Water System Extension Areas Subtotal</b>	<b>\$62,000,000</b>

#### Other Water System Improvements

<i>Description</i>	<i>Total Estimated Project Cost</i>
Water Treatment Plant Improvements <sup>1</sup>	\$7,500,000
<b>Other Water System Improvements Subtotal</b>	<b>\$7,500,000</b>
<b>Grand Total</b>	<b>\$69,500,000</b>

Notes:

1. Settlement cost is half of the Water Treatment Plant Improvements Estimate of Probable Cost.

## Preliminary Estimate of Probable Cost

Owner:

Plainfield Charter Township

Project Title:

Area 1 - House Street, Herrington Avenue & Chandler Drive Loop

Date:

September 11, 2019

Project #:

2170602

<i>Item No.</i>	<i>Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Unit Price</i> <sup>1</sup>	<i>Total Amount</i>
1	16-inch Ductile Iron, Class 53, Water Main with Polywrap Including Appurtenances	17,860	LF	\$145.00	\$2,589,700.00
2	8-inch Ductile Iron, Class 53, Water Main with Polywrap Including Appurtenances	950	LF	\$80.00	\$76,000.00
3	Water Service to Residence <sup>2</sup>	100	EA	\$7,500.00	\$750,000.00
4	Well Abandonment	100	EA	\$5,000.00	\$500,000.00
5	Bore & Jack Under US-131	650	LF	\$500.00	\$325,000.00
6	Tree Clearing	18,160	LF	\$10.00	\$181,600.00
7	Road Removal & Replacement <sup>3</sup>	18,160	LF	\$60.00	\$1,089,600.00
8	Driveway Removal & Replacement	56	EA	\$1,000.00	\$56,000.00
9	Lawn Restoration	18,160	LF	\$10.00	\$181,600.00
<b>Total Construction Estimate:</b>					<b>\$5,749,500.00</b>
10	Engineering, Legal, Administration, Contingencies (30% of Total Construction)	1	LS	\$1,724,850.00	\$1,724,850.00
11	Allowance to Address Soil and/or Groundwater Contamination During Construction (5% of Total Construction)	1	LS	\$287,475.00	\$287,475.00
12	Plainfield Charter Township Frontage Fee	37,620	LF	\$30.00	\$1,128,600.00
13	Plainfield Charter Township Water Service Fees (Connection Fee \$1,475, Tap-On Fee \$930, Meter Charge \$275)	100	EA	\$2,680.00	\$268,000.00
<b>Total Estimate:</b>					<b>\$9,158,000.00</b>

Notes:

1. Construction costs based on 2018-2019 dollars.
2. Water Service to Residence includes water main tap, corporation stop, curb stop & box, and 130' of 1" copper service (average 100' onto private property). Includes a \$2,000 allowance for house plumbing modifications. Includes service to all parcels that have a house with frontage along new water main.
3. Road Removal & Replacement assumes half of a 26' wide road is replaced full depth and the other half is milled & filled 1.5".

## Preliminary Estimate of Probable Cost

Owner:

Plainfield Charter Township

Project Title:

Area 2 - Herrington Avenue from 10 Mile Road to Brent Road (Including Brittany Drive & Brent Road)

Date:

September 11, 2019

Project #:

2170602

<i>Item</i>					
<i>No.</i>	<i>Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Unit Price</i> <sup>1</sup>	<i>Total Amount</i>
1	12-inch Ductile Iron, Class 53, Water Main with Polywrap Including Appurtenances	3,235	LF	\$115.00	\$372,025.00
2	8-inch Ductile Iron, Class 53, Water Main with Polywrap Including Appurtenances	1,760	LF	\$80.00	\$140,800.00
3	Water Service to Residence <sup>2</sup>	27	EA	\$7,500.00	\$202,500.00
4	Well Abandonment	27	EA	\$5,000.00	\$135,000.00
5	Tree Clearing	4,995	LF	\$10.00	\$49,950.00
6	Road Removal & Replacement <sup>3</sup>	4,995	LF	\$60.00	\$299,700.00
7	Driveway Removal & Replacement	13	EA	\$1,000.00	\$13,000.00
8	Lawn Restoration	4,995	LF	\$10.00	\$49,950.00
<b>Total Construction Estimate:</b>					<b>\$1,262,925.00</b>
9	Engineering, Legal, Administration, Contingencies (30% of Total Construction)	1	LS	\$378,877.50	\$378,877.50
10	Plainfield Charter Township Frontage Fee	9,990	LF	\$30.00	\$299,700.00
11	Plainfield Charter Township Water Service Fees (Connection Fee \$1,475, Tap-On Fee \$930, Meter Charge \$275)	27	EA	\$2,680.00	\$72,360.00
<b>Total Estimate:</b>					<b>\$2,014,000.00</b>

Notes:

1. Construction costs based on 2018-2019 dollars.
2. Water Service to Residence includes water main tap, corporation stop, curb stop & box, and 130' of 1" copper service (average 100' onto private property). Includes a \$2,000 allowance for house plumbing modifications. Includes service to all parcels that have a house with frontage along new water main.
3. Road Removal & Replacement assumes half of a 26' wide road is replaced full depth and the other half is milled & filled 1.5".

## Preliminary Estimate of Probable Cost

Owner:

Plainfield Charter Township

Project Title:

Area 3 - Herrington Avenue from Chandler Drive to west of Belmont Avenue (Including Terrie Lynn, Meek Drive, Korben Woods Court, Sprucewood Court & Sprucewood Drive)

Date:

September 11, 2019

Project #:

2170602

*Item*

<i>No.</i>	<i>Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Unit Price</i> <sup>1</sup>	<i>Total Amount</i>
1	8-inch Ductile Iron, Class 53, Water Main with Polywrap Including Appurtenances	6,600	LF	\$80.00	\$528,000.00
2	Water Service to Residence <sup>2</sup>	44	EA	\$7,500.00	\$330,000.00
3	Well Abandonment	44	EA	\$5,000.00	\$220,000.00
4	Tree Clearing	2,500	LF	\$10.00	\$25,000.00
5	Road Removal & Replacement <sup>3</sup>	6,600	LF	\$60.00	\$396,000.00
6	Driveway Removal & Replacement	20	EA	\$1,000.00	\$20,000.00
7	Lawn Restoration	6,600	LF	\$10.00	\$66,000.00
<b>Total Construction Estimate:</b>					<b>\$1,585,000.00</b>
8	Engineering, Legal, Administration, Contingencies (30% of Total Construction)	1	LS	\$475,500.00	\$475,500.00
9	Plainfield Charter Township Frontage Fee	13,200	LF	\$30.00	\$396,000.00
10	Plainfield Charter Township Water Service Fees (Connection Fee \$1,475, Tap-On Fee \$930, Meter Charge \$275)	44	EA	\$2,680.00	\$117,920.00
<b>Total Estimate:</b>					<b>\$2,574,000.00</b>

Notes:

1. Construction costs based on 2018-2019 dollars.
2. Water Service to Residence includes water main tap, corporation stop, curb stop & box, and 130' of 1" copper service (average 100' onto private property). Includes a \$2,000 allowance for house plumbing modifications. Includes service to all parcels that have a house with frontage along new water main.
3. Road Removal & Replacement assumes half of a 26' wide road is replaced full depth and the other half is milled & filled 1.5".

## Preliminary Estimate of Probable Cost

Owner:

Plainfield Charter Township

Project Title:

Area 4 - Belmont Avenue from Post Drive to approximately 1000 feet south of Packer Drive (Including Pixley Avenue, Pine Hill Drive, Frond Street, a portion of Van Dam Drive & Wildwood Creek Drive)

Date:

September 11, 2019

Project #:

2170602

*Item*

<i>No.</i>	<i>Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Unit Price</i> <sup>1</sup>	<i>Total Amount</i>
1	12-inch Ductile Iron, Class 53, Water Main with Polywrap Including Appurtenances	6,130	LF	\$115.00	\$704,950.00
2	8-inch Ductile Iron, Class 53, Water Main with Polywrap Including Appurtenances	8,440	LF	\$80.00	\$675,200.00
3	Water Service to Residence <sup>2</sup>	101	EA	\$7,500.00	\$757,500.00
4	Well Abandonment	101	EA	\$5,000.00	\$505,000.00
5	Tree Clearing	14,570	LF	\$10.00	\$145,700.00
6	Road Removal & Replacement <sup>3</sup>	14,570	LF	\$60.00	\$874,200.00
7	Driveway Removal & Replacement	43	EA	\$1,000.00	\$43,000.00
8	Lawn Restoration	14,570	LF	\$10.00	\$145,700.00
<b>Total Construction Estimate:</b>					<b>\$3,851,250.00</b>
9	Engineering, Legal, Administration, Contingencies (30% of Total Construction)	1	LS	\$1,155,375.00	\$1,155,375.00
10	Plainfield Charter Township Frontage Fee	29,140	LF	\$30.00	\$874,200.00
11	Plainfield Charter Township Water Service Fees (Connection Fee \$1,475, Tap-On Fee \$930, Meter Charge \$275)	101	EA	\$2,680.00	\$270,680.00
<b>Total Estimate:</b>					<b>\$6,152,000.00</b>

Notes:

1. Construction costs based on 2018-2019 dollars.
2. Water Service to Residence includes water main tap, corporation stop, curb stop & box, and 130' of 1" copper service (average 100' onto private property). Includes a \$2,000 allowance for house plumbing modifications. Includes service to all parcels that have a house with frontage along new water main.
3. Road Removal & Replacement assumes half of a 26' wide road is replaced full depth and the other half is milled & filled 1.5".

## Preliminary Estimate of Probable Cost

**Owner:**

Plainfield Charter Township

**Project Title:**

Area 7 - Wolven Avenue, Wellington Ridge & 43 North (Including Windstone Drive, Stoneridge Drive, Bent Tree Ridge, Royal Hannah Drive, Sir Charles Drive, Lady Lauren Drive, Hopewell Drive, Hopewell Court, Elstner Avenue, & 11 Mile Road from Wolven Avenue to US-131)

**Date:**

September 11, 2019

**Project #:**

2170602

<i>Item No.</i>	<i>Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Unit Price</i> <sup>1</sup>	<i>Total Amount</i>
1	16-inch Ductile Iron, Class 53, Water Main with Polywrap Including Appurtenances	2,650	LF	\$145.00	\$384,250.00
2	12-inch Ductile Iron, Class 53, Water Main with Polywrap Including Appurtenances	8,940	LF	\$115.00	\$1,028,100.00
3	8-inch Ductile Iron, Class 53, Water Main with Polywrap Including Appurtenances	10,925	LF	\$80.00	\$874,000.00
4	Water Service to Residence <sup>2</sup>	168	EA	\$7,500.00	\$1,260,000.00
5	Well Abandonment	168	EA	\$5,000.00	\$840,000.00
6	Tree Clearing	13,085	LF	\$10.00	\$130,850.00
7	Road Removal & Replacement <sup>3</sup>	20,160	LF	\$60.00	\$1,209,600.00
8	Driveway Removal & Replacement	72	EA	\$1,000.00	\$72,000.00
9	Lawn Restoration	22,515	LF	\$10.00	\$225,150.00
<b>Total Construction Estimate:</b>					<b>\$6,023,950.00</b>
10	Engineering, Legal, Administration, Contingencies (30% of Total Construction)	1	LS	\$1,807,185.00	\$1,807,185.00
11	Allowance to Address Soil and/or Groundwater Contamination During Construction (5% of Total Construction)	1	LS	\$301,197.50	\$301,197.50
12	Plainfield Charter Township Frontage Fee	45,030	LF	\$30.00	\$1,350,900.00
13	Plainfield Charter Township Water Service Fees (Connection Fee \$1,475, Tap-On Fee \$930, Meter Charge \$275)	168	EA	\$2,680.00	\$450,240.00
<b>Total Estimate:</b>					<b>\$9,933,000.00</b>

**Notes:**

1. Construction costs based on 2018-2019 dollars.
2. Water Service to Residence includes water main tap, corporation stop, curb stop & box, and 130' of 1" copper service (average 100' onto private property). Includes a \$2,000 allowance for house plumbing modifications. Includes service to all parcels that have a house with frontage along new water main.
3. Road Removal & Replacement assumes half of a 26' wide road is replaced full depth and the other half is milled & filled 1.5".

## Preliminary Estimate of Probable Cost

Owner:

Plainfield Charter Township

Project Title:

Area 8 - Jewell Avenue from 10 Mile Road to 11 Mile Road (Including 10 Mile Road and 11 Mile Road from Jewell Avenue to Algoma Avenue, Algoma Avenue from 10 Mile Road to 11 Mile Road, Algoma Woods Drive, Point High Drive, Hidden Timbers Drive, Green Timbers, Clearwater Court, Winding Ridge Trail, Oakwood Trail, Booth Bay Development, & Garden Gate Development)

Date:

September 11, 2019

Project #:

2170602

<i>Item No.</i>	<i>Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Unit Price <sup>1</sup></i>	<i>Total Amount</i>
1	12-inch Ductile Iron, Class 53, Water Main with Polywrap Including Appurtenances	15,935	LF	\$115.00	\$1,832,525.00
2	8-inch Ductile Iron, Class 53, Water Main with Polywrap Including Appurtenances	15,025	LF	\$80.00	\$1,202,000.00
3	Water Service to Residence <sup>2</sup>	182	EA	\$7,500.00	\$1,365,000.00
4	Well Abandonment	182	EA	\$5,000.00	\$910,000.00
5	Tree Clearing	25,460	LF	\$10.00	\$254,600.00
6	Road Removal & Replacement <sup>3</sup>	30,960	LF	\$60.00	\$1,857,600.00
7	Driveway Removal & Replacement	103	EA	\$1,000.00	\$103,000.00
8	Lawn Restoration	30,960	LF	\$10.00	\$309,600.00
<b>Total Construction Estimate:</b>					<b>\$7,834,325.00</b>
9	Engineering, Legal, Administration, Contingencies (30% of Total Construction)	1	LS	\$2,350,297.50	\$2,350,297.50
10	Plainfield Charter Township Frontage Fee	61,920	LF	\$30.00	\$1,857,600.00
11	Plainfield Charter Township Water Service Fees (Connection Fee \$1,475, Tap-On Fee \$930, Meter Charge \$275)	182	EA	\$2,680.00	\$487,760.00
<b>Total Estimate:</b>					<b>\$12,530,000.00</b>

Notes:

1. Construction costs based on 2018-2019 dollars.
2. Water Service to Residence includes water main tap, corporation stop, curb stop & box, and 130' of 1" copper service (average 100' onto private property). Includes a \$2,000 allowance for house plumbing modifications. Includes service to all parcels that have a house with frontage along new water main.
3. Road Removal & Replacement assumes half of a 26' wide road is replaced full depth and the other half is milled & filled 1.5".

## Preliminary Estimate of Probable Cost

Owner:

Plainfield Charter Township

Project Title:

Area 9 - 10 Mile Road & Pine Island Drive Loop (Including Squirewood Drive, Freska Pines, Wateredge Drive & Freska Lake Drive)

Date:

September 11, 2019

Project #:

2170602

*Item*

<i>No.</i>	<i>Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Unit Price</i> <sup>1</sup>	<i>Total Amount</i>
1	12-inch Ductile Iron, Class 53, Water Main with Polywrap Including Appurtenances	14,645	LF	\$115.00	\$1,684,175.00
2	8-inch Ductile Iron, Class 53, Water Main with Polywrap Including Appurtenances	5,085	LF	\$80.00	\$406,800.00
3	Water Service to Residence <sup>2</sup>	124	EA	\$7,500.00	\$930,000.00
4	Well Abandonment	124	EA	\$5,000.00	\$620,000.00
5	Tree Clearing	15,730	LF	\$10.00	\$157,300.00
6	Road Removal & Replacement <sup>3</sup>	19,730	LF	\$60.00	\$1,183,800.00
7	Driveway Removal & Replacement	37	EA	\$1,000.00	\$37,000.00
8	Lawn Restoration	19,730	LF	\$10.00	\$197,300.00
<b>Total Construction Estimate:</b>					<b>\$5,216,375.00</b>
9	Engineering, Legal, Administration, Contingencies (30% of Total Construction)	1	LS	\$1,564,912.50	\$1,564,912.50
10	Plainfield Charter Township Frontage Fee	39,460	LF	\$30.00	\$1,183,800.00
11	Plainfield Charter Township Water Service Fees (Connection Fee \$1,475, Tap-On Fee \$930, Meter Charge \$275)	124	EA	\$2,680.00	\$332,320.00
<b>Total Estimate:</b>					<b>\$8,297,000.00</b>

Notes:

1. Construction costs based on 2018-2019 dollars.
2. Water Service to Residence includes water main tap, corporation stop, curb stop & box, and 130' of 1" copper service (average 100' onto private property). Includes a \$2,000 allowance for house plumbing modifications. Includes service to all parcels that have a house with frontage along new water main.
3. Road Removal & Replacement assumes half of a 26' wide road is replaced full depth and the other half is milled & filled 1.5".

## Preliminary Estimate of Probable Cost

Owner:

Plainfield Charter Township

Project Title:

Area 10 - Rogue River Drive (Pvt.)

Date:

September 11, 2019

Project #:

2170602

<i>Item No.</i>	<i>Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Unit Price<sup>1</sup></i>	<i>Total Amount</i>
1	8-inch Ductile Iron, Class 53, Water Main with Polywrap Including Appurtenances	1,940	LF	\$80.00	\$155,200.00
2	Water Service to Residence <sup>2</sup>	9	EA	\$7,500.00	\$67,500.00
3	Well Abandonment	9	EA	\$5,000.00	\$45,000.00
4	Tree Clearing	1,000	LF	\$10.00	\$10,000.00
5	Road Removal & Replacement <sup>3</sup>	1,000	LF	\$60.00	\$60,000.00
6	Driveway Removal & Replacement	5	EA	\$1,000.00	\$5,000.00
7	Lawn Restoration	1,940	LF	\$10.00	\$19,400.00
<b>Total Construction Estimate:</b>					<b>\$362,100.00</b>
8	Engineering, Legal, Administration, Contingencies (30% of Total Construction)	1	LS	\$108,630.00	\$108,630.00
9	Plainfield Charter Township Frontage Fee	3,880	LF	\$30.00	\$116,400.00
10	Plainfield Charter Township Water Service Fees (Connection Fee \$1,475, Tap-On Fee \$930, Meter Charge \$275)	9	EA	\$2,680.00	\$24,120.00
<b>Total Estimate:</b>					<b>\$611,000.00</b>

Notes:

1. Construction costs based on 2018-2019 dollars.
2. Water Service to Residence includes water main tap, corporation stop, curb stop & box, and 130' of 1" copper service (average 100' onto private property). Includes a \$2,000 allowance for house plumbing modifications. Includes service to all parcels that have a house with frontage along new water main.
3. Road Removal & Replacement assumes half of a 26' wide road is replaced full depth and the other half is milled & filled 1.5".

## Preliminary Estimate of Probable Cost

Owner:

Plainfield Charter Township

Project Title:

Area 13 - Packer Drive Loop

Date:

September 11, 2019

Project #:

2170602

<i>Item No.</i>	<i>Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Unit Price</i> <sup>1</sup>	<i>Total Amount</i>
1	12-inch Ductile Iron, Class 53, Water Main with Polywrap Including Appurtenances	6,125	LF	\$115.00	\$704,375.00
2	8-inch Ductile Iron, Class 53, Water Main with Polywrap Including Appurtenances	5,075	LF	\$80.00	\$406,000.00
3	Water Service to Residence <sup>2</sup>	60	EA	\$7,500.00	\$450,000.00
4	Well Abandonment	60	EA	\$5,000.00	\$300,000.00
5	Tree Clearing	11,200	LF	\$10.00	\$112,000.00
6	Road Removal & Replacement <sup>3</sup>	11,200	LF	\$60.00	\$672,000.00
7	Driveway Removal & Replacement	27	EA	\$1,000.00	\$27,000.00
8	Lawn Restoration	11,200	LF	\$10.00	\$112,000.00
<b>Total Construction Estimate:</b>					<b>\$2,783,375.00</b>
9	Engineering, Legal, Administration, Contingencies (30% of Total Construction)	1	LS	\$835,012.50	\$835,012.50
10	Plainfield Charter Township Frontage Fee	22,400	LF	\$30.00	\$672,000.00
11	Plainfield Charter Township Water Service Fees (Connection Fee \$1,475, Tap-On Fee \$930, Meter Charge \$275)	60	EA	\$2,680.00	\$160,800.00
<b>Total Estimate:</b>					<b>\$4,451,000.00</b>

Notes:

1. Construction costs based on 2018-2019 dollars.
2. Water Service to Residence includes water main tap, corporation stop, curb stop & box, and 130' of 1" copper service (average 100' onto private property). Includes a \$2,000 allowance for house plumbing modifications. Includes service to all parcels that have a house with frontage along new water main.
3. Road Removal & Replacement assumes half of a 26' wide road is replaced full depth and the other half is milled & filled 1.5".

## Preliminary Estimate of Probable Cost

Owner:

Plainfield Charter Township

Project Title:

Area 16 - Miscellaneous Water Service Locations with Existing Water Main Along Parcel Frontage

Date:

September 11, 2019

Project #:

2170602

<i>Item No.</i>	<i>Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Unit Price</i> <sup>1</sup>	<i>Total Amount</i>
1	Long Side Water Services (40'-200' Length) PFOS & PFOA > 10 ng/L	8	EA	\$7,750.00	\$62,000.00
2	Short Side Water Services (40'-200' Length) PFOS & PFOA > 10 ng/L	10	EA	\$7,000.00	\$70,000.00
3	Long Side Water Services (201'-575' Length) PFOS & PFOA > 10 ng/L	5	EA	\$16,000.00	\$80,000.00
4	Short Side Water Services (201'-575' Length) PFOS & PFOA > 10 ng/L	2	EA	\$15,000.00	\$30,000.00
5	Water Services to Residence PFAS > Non-Detect	76	EA	\$11,500.00	\$874,000.00
6	Well Abandonment	101	EA	\$5,000.00	\$505,000.00
7	Lawn Restoration	101	EA	\$500.00	\$50,500.00
<b>Total Construction Estimate:</b>					<b>\$1,671,500.00</b>
8	Engineering, Legal, Administration, Contingencies (30% of Total Construction)	1	LS	\$501,450.00	\$501,450.00
9	Plainfield Charter Township Water Service Fees (Connection Fee \$1,475, Tap-On Fee \$930, Meter Charge \$275)	101	EA	\$2,680.00	\$270,680.00
<b>Total Estimate:</b>					<b>\$2,444,000.00</b>

Notes:

1. Construction costs based on 2018-2019 dollars.

2. Water Services includes water main tap, corporation stop, curb stop & box, and 1" copper service as detailed. Includes a \$2,000 allowance for house plumbing modifications. Includes all parcels that had a detect for PFAS on the test results provided by Rose & Westra, dated 5/15/18, and have existing water main along the frontage to connect to.

## Preliminary Estimate of Probable Cost

Owner:

Plainfield Charter Township

Project Title:

Area 17 - Laurentian Court

Date:

September 11, 2019

Project #:

2170602

<i>Item No.</i>	<i>Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Unit Price</i> <sup>1</sup>	<i>Total Amount</i>
1	8-inch Ductile Iron, Class 53, Water Main with Polywrap Including Appurtenances	1,870	LF	\$80.00	\$149,600.00
2	Water Service to Residence <sup>2</sup>	9	EA	\$7,500.00	\$67,500.00
3	Well Abandonment	9	EA	\$5,000.00	\$45,000.00
4	Tree Clearing	1,870	LF	\$10.00	\$18,700.00
5	Road Removal & Replacement <sup>3</sup>	1,870	LF	\$60.00	\$112,200.00
6	Driveway Removal & Replacement	5	EA	\$1,000.00	\$5,000.00
7	Lawn Restoration	1,870	LF	\$10.00	\$18,700.00
<b>Total Construction Estimate:</b>					<b>\$416,700.00</b>
8	Engineering, Legal, Administration, Contingencies (30% of Total Construction)	1	LS	\$125,010.00	\$125,010.00
9	Plainfield Charter Township Frontage Fee	3,740	LF	\$30.00	\$112,200.00
10	Plainfield Charter Township Water Service Fees (Connection Fee \$1,475, Tap-On Fee \$930, Meter Charge \$275)	9	EA	\$2,680.00	\$24,120.00
<b>Total Estimate:</b>					<b>\$678,000.00</b>

Notes:

1. Construction costs based on 2018-2019 dollars.
2. Water Service to Residence includes water main tap, corporation stop, curb stop & box, and 130' of 1" copper service (average 100' onto private property). Includes a \$2,000 allowance for house plumbing modifications. Includes service to all parcels that have a house with frontage along new water main.
3. Road Removal & Replacement assumes half of a 26' wide road is replaced full depth and the other half is milled & filled 1.5".

## Preliminary Estimate of Probable Cost

Owner:

Plainfield Charter Township

Project Title:

Area 18 - Rogue Ridge Drive (Pvt.)

Date:

September 11, 2019

Project #:

2170602

<i>Item</i>					
<i>No.</i>	<i>Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Unit Price</i> <sup>1</sup>	<i>Total Amount</i>
1	8-inch Ductile Iron, Class 53, Water Main with Polywrap Including Appurtenances	1,000	LF	\$80.00	\$80,000.00
2	Bore & Jack 10 Mile Road	80	LF	\$500.00	\$40,000.00
3	Water Service to Residence <sup>2</sup>	7	EA	\$7,500.00	\$52,500.00
4	Well Abandonment	7	EA	\$5,000.00	\$35,000.00
5	Road Removal & Replacement <sup>3</sup>	1,000	LF	\$60.00	\$60,000.00
6	Driveway Removal & Replacement	4	EA	\$1,000.00	\$4,000.00
7	Lawn Restoration	1,000	LF	\$10.00	\$10,000.00
<b>Total Construction Estimate:</b>					<b>\$281,500.00</b>
8	Engineering, Legal, Administration, Contingencies (30% of Total Construction)	1	LS	\$84,450.00	\$84,450.00
9	Plainfield Charter Township Frontage Fee	2,000	LF	\$30.00	\$60,000.00
10	Plainfield Charter Township Water Service Fees (Connection Fee \$1,475, Tap-On Fee \$930, Meter Charge \$275)	7	EA	\$2,680.00	\$18,760.00
<b>Total Estimate:</b>					<b>\$445,000.00</b>

Notes:

1. Construction costs based on 2018-2019 dollars.
2. Water Service to Residence includes water main tap, corporation stop, curb stop & box, and 130' of 1" copper service (average 100' onto private property). Includes a \$2,000 allowance for house plumbing modifications. Includes service to all parcels that have a house with frontage along new water main.
3. Road Removal & Replacement assumes half of a 26' wide road is replaced full depth and the other half is milled & filled 1.5".

# Estimate of Probable Cost

Owner:  
Plainfield Charter Township

Project Title:  
GAC Pre-Treatment System

Date:  
October 7, 2019

Project #:  
2170602

Item No.	Description	Quantity	Unit	Unit Price	Total Amount
1	Property Acquisition	1	LS	\$500,000	\$500,000
2	GAC Treatment Systems (Calgon Model 12-40) <sup>1</sup>	12	EA	\$500,000	\$6,000,000
3	Prefabricated Steel Building, Approx. 100-ft x 250-ft	25,000	SF	\$120	\$3,000,000
4	Site Piping and Site Work	1	LS	\$2,000,000	\$2,000,000
<b>Construction Total:</b>					<b>\$11,500,000</b>
<b>Engineering, Legal, Administrative, and Contingency (30%):</b>					<b>\$3,500,000</b>
<b>Grand Total:</b>					<b>\$15,000,000</b>

NOTES: 1. CCC Model 12-40 Systems (2 vessels); 12 systems each 1,010 GPM for 16 mgd firm capacity