

Appendix F

Detailed Cost Estimates

Table F-1. Bassett Creek Park Pond - Base Alternate Cost Estimate

Description	Unit	Estimated Quantity	Unit Price	Extension	
Mobilization/Demobilization	L.S.	1	\$85,300	\$85,300	10% of project cost
Erosion Control	L.S.	1	\$18,000	\$18,000	
Clearing and Grubbing	L.S.	1	\$5,000	\$5,000	
Floatation Silt Curtain	L.F.	450	\$15	\$6,548	
Control of Water, Dewatering	L.S.	1	\$20,000	\$20,000	
Pond Dredging of MPCA Dredged Material Level 1- Removal and Disposal	C.Y.	6,755	\$38	\$256,690	10' width
Pond Dredging of MPCA Dredged Material Level 3- Removal and Disposal	C.Y.	6,755	\$70	\$472,850	
Site Grading	S.Y.	800	\$4	\$3,200	
Top Soil Borrow	C.Y.	67	\$26	\$1,733	
Flexterra HP-FGM	S.Y.	800	\$5	\$4,000	
Trail Replacement	S.Y.	2,000	\$30	\$60,000	
Traffic Control/Pedestrian Control/Trail Closure	L.S.	1	\$4,000	\$4,000	
Subtotal				\$937,321	
Contingency (30%)				\$281,196	
Total				\$1,218,517	
Engineering (30%)				\$281,196	
Total w/Engineering				\$1,499,713	

1. This assumes half of the material is Level 1 and half is Level 3 based on the sampling completed to date. Additional sampling will be needed to determine the break point between unregulated fill and contaminated material.

30-yr and Annualized Cost analysis

Estimated life span (years)	30	
Expected annual maintenance	\$ -	
End of life span maintenance	\$ 256,335	based on sediment accumulation rate of 35 CY per year (from P8 model)
Future Capital Cost	\$ 3,640,200	
Future annual maintenance	\$ -	
Future end of life span cost	\$ 623,000	
Total Future Worth	\$ 4,263,200	
Annualized Cost	\$ 89,600	

Erosion Control				
Item	Unit	Est. Quantity	Unit Price	Extension
Erosion Control Construction Entrance	Each	1	1,045.00	1045
Street Sweeping	L.S.	1	1,000.00	1000
Inlet Protection	Each	5	194.00	970
Erosion Control Siltation Logs	L.F.	2000	7.50	15000
Total				18015

Restoration (6 access points, 24' wide, 50' long) 800 SY

Table F-2. Bassett Creek Park Pond - Alternative 2 Cost Estimate

Description	Unit	Estimated Quantity	Unit Price	Extension	
Mobilization/Demobilization	L.S.	1	\$118,300	\$118,300	10% of project cost
Erosion Control	L.S.	1	\$18,000	\$18,000	
Clearing and Grubbing	L.S.	1	\$5,000	\$5,000	
Floatation Silt Curtain	L.F.	450	\$15	\$6,548	
Control of Water, Dewatering	L.S.	1	\$20,000	\$20,000	
Pond Dredging of MPCA Dredged Material Level 1- Removal and Disposal	C.Y.	15,461	\$38	\$587,518	10' width
Pond Dredging of MPCA Dredged Material Level 3- Removal and Disposal	C.Y.	6,755	\$70	\$472,850	
Site Grading	S.Y.	800	\$4	\$3,200	
Top Soil Borrow	C.Y.	67	\$26	\$1,733	
Flexterra HP-FGM	S.Y.	800	\$5	\$4,000	
Trail Replacement	S.Y.	2,000	\$30	\$60,000	
Traffic Control/Pedestrian Control/Trail Closure	L.S.	1	\$4,000	\$4,000	
Subtotal				\$1,301,149	
Contingency (30%)				\$390,345	
Total				\$1,691,493	
Engineering (30%)				\$390,345	
Total w/Engineering				\$2,081,838	

1. This assumes half of the material is Level 1 and half is Level 3 based on the sampling completed to date. Additional sampling will be needed to determine the break point between unregulated fill and contaminated material.

30-yr and Annualized Cost analysis

Estimated life span (years)	30	
Expected annual maintenance	\$ -	
End of life span maintenance	\$ 256,000	based on sediment accumulation rate of 35 CY per year (from P8 model)
Future Capital Cost	\$ 5,053,200	
Future annual maintenance	\$ -	
Future end of life span cost	\$ 622,000	
Total Future Worth	\$ 5,675,200	
Annualized Cost	\$ 119,300	

Erosion Control				
Item	Unit	Est. Quanti	Unit Price	Extension
Erosion Control Construction Entrance	Each	1	1,045.00	1045
Street Sweeping	L.S.	1	1,000.00	1000
Inlet Protection	Each	5	194.00	970
Erosion Control Siltation Logs	L.F.	2000	7.50	15000

Total18015

Restoration (6 access points, 24' wide, 50' long)800 SY

Table F-3. Bassett Creek Park Pond - Add-on 1 Cost Estimate

Description	Unit	Estimated Quantity	Unit Price	Extension
Mobilization/Demobilization	L.S.	1	\$12,900	\$12,900
Erosion Control	L.S.	0	\$18,000	\$0
Clearing and Grubbing	L.S.	0	\$5,000	\$0
Floatation Silt Curtain	L.F.	0	\$15	\$0
Control of Water, Dewatering	L.S.	0	\$20,000	\$0
Pond Dreding of MPCA Dredged Material Level 1- Removal and Disposal	C.Y.	0	\$38	\$0
Pond Dreding of MPCA Dredged Material Level 3- Removal and Disposal	C.Y.	1,604	\$70	\$112,275
Berm Construction (Rock Gabions)	Each	35	\$450	\$15,750
Site Grading	S.Y.	0	\$4	\$0
Top Soil Borrow	C.Y.	0	\$26	\$0
Flexterra HP-FGM	S.Y.	0	\$5	\$0
Trail Replacement	S.Y.	0	\$30	\$0
Traffic Control/Pedestrian Control/Trail Closure	L.S.	0	\$4,000	\$0
Subtotal				\$140,925
Contingency (30%)				\$42,277
Total				\$183,202
Engineering (30%)				\$42,277
Total w/Engineering				\$225,480

1. This assumes half of the material is Level 1 and half is Level 3 based on the sampling completed to date. Additional sampling will be needed to determine the break point between unregulated fill and contaminated material.

30-yr and Annualized Cost analysis

Estimated life span (years)	30	
Expected annual maintenance	\$ 11,500	based on sediment accumulation rate of 35 CY per year (from P8 model)
End of life span maintenance	\$ -	
Future Capital Cost	\$ 547,300	
Future annual maintenance	\$ 547,120	
Future end of life span cost	\$ -	
Total Future Worth	\$ 1,094,400	
Annualized Cost	\$ 23,000	

Erosion Control				
Item	Unit	Est. Quanti	Unit Price	Extension
Erosion Control Construction Entrance	Each	1	1,045.00	1045
Street Sweeping	L.S.	1	1,000.00	1000
Inlet Protection	Each	5	194.00	970
Erosion Control Siltation Logs	L.F.	2000	7.50	15000

Total18015

Restoration (6 access points, 24' wide, 50' long)800 SY

Annual Maintenance	Estimated Quantity	Unit Price	Extension
Mobilization/Demobilization	1	1045	1045
Erosion Control	1	3000	3000
Pond Dreding of MPCA Dredged Material Level 3- Removal and Disposal	35	70	2450
Restoration	1	2000	2000
Sediment Sampling	1	3000	3000
Total			11495

Table F-4. Bassett Creek Park Pond - Add-on 1 with No Other Pond Excavation (Construction of Forebay Only) Cost Estimate

Description	Unit	Estimated Quantity	Unit Price	Extension	
Mobilization/Demobilization	L.S.	1	\$66,700	\$66,700	10% of project cost
Erosion Control	L.S.	1	\$8,500	\$8,500	
Clearing and Grubbing	L.S.	1	\$5,000	\$5,000	
Floatation Silt Curtain	L.F.	145	\$15	\$2,110	
Control of Water, Dewatering	L.S.	1	\$15,000	\$15,000	
Pond Dreding of MPCA Dredged Material Level 1- Removal and Disposal	C.Y.	0	\$38	\$0	10' width
Pond Dreding of MPCA Dredged Material Level 3- Removal and Disposal	C.Y.	8,221	\$70	\$575,465	
Berm Construction (Rock Gabions)	Each	35	\$450	\$15,750	
Site Grading	S.Y.	400	\$4	\$1,600	
Top Soil Borrow	C.Y.	33	\$26	\$867	
Flexterra HP-FGM	S.Y.	400	\$5	\$2,000	
Trail Replacement	S.Y.	1,200	\$30	\$36,000	
Traffic Control/Pedestrian Control/Trail Closure	L.S.	1	\$4,000	\$4,000	
Subtotal				\$732,991	
Contingency (30%)				\$219,897	
Total				\$952,889	
Engineering (30%)				\$219,897	
Total w/Engineering				\$1,172,786	

1. This assumes half of the material is Level 1 and half is Level 3 based on the sampling completed to date. Additional sampling will be needed to determine the break point between unregulated fill and contaminated material.

30-yr and Annualized Cost analysis

Estimated life span (years)	30	
Expected annual maintenance	\$ 11,500	based on sediment accumulation rate of 35 CY per year (from P8 model)
End of life span maintenance	\$ -	
Future Capital Cost	\$ 2,846,700	
Future annual maintenance	\$ 547,120	
Future end of life span cost	\$ -	
Total Future Worth	\$ 3,393,800	
Annualized Cost	\$ 71,300	

Erosion Control				
Item	Unit	Est. Quanti	Unit Price	Extension
Erosion Control Construction Entrance	Each	1	1,045.00	1045
Street Sweeping	L.S.	1	1,000.00	1000
Inlet Protection	Each	5	194.00	970
Erosion Control Siltation Logs	L.F.	700	7.50	5250

Total 8265

Restoration (6 access points, 24' wide, 50' long) 800 SY

Annual Maintenance	Estimated Quantity	Unit Price	Extension
Mobilization/Demobilization	1	1045	1045
Erosion Control	1	3000	3000
Pond Dreding of MPCA Dredged Material Level 3- Removal and Disposal	35	70	2450
Restoration	1	2000	2000
Sediment Sampling	1	3000	3000
Total			11495

Table F-5. Bassett Creek Park Pond - Add-on 2 Cost Estimate

Description	Unit	Estimated Quantity	Unit Price	Extension	
Mobilization/Demobilization	L.S.	1	\$4,800	\$4,800	10% of project cost
Vegetation Establishment and Maintenance	Acre	4	\$11,000	\$47,980	
					10' width
Subtotal				\$52,780	
Contingency (30%)				\$15,834	
Total				\$68,614	
Engineering (30%)				\$15,834	
Total w/Engineering				\$84,448	

1. This assumes half of the material is Level 1 and half is Level 3 based on the sampling completed to date. Additional sampling will be needed to determine the break point between unregulated fill and contaminated material.

30-yr and Annualized Cost analysis

Estimated life span (years)		30
Expected annual maintenance	\$	17,153
End of life span maintenance	\$	-
Future Capital Cost	\$	205,000
Future annual maintenance	\$	816,080
Future end of life span cost	\$	-
Total Future Worth	\$	1,021,100
Annualized Cost	\$	21,500

Erosion Control				
Item	Unit	Est. Quanti	Unit Price	Extension
Erosion Control Construction Entrance	Each	1	1,045.00	1045
Street Sweeping	L.S.	1	1,000.00	1000
Inlet Protection	Each	5	194.00	970
Erosion Control Siltation Logs	L.F.	2000	7.50	15000

Total18015

Restoration (6 access points, 24' wide, 50' long)800 SY

Annual Maintenance	Estimated Quantity	Unit Price	Extension
Mobilization/Demobilization	1	5700	5700
Erosion Control	1	3000	3000
Pond Dredging of MPCA Dredged Material Level 3- Removal and Disposal	700	70	49000
Restoration	1	2000	2000
Sediment Sampling	1	3000	3000
Total			62700

Table F-6. Winnetka Pond East - Base Alternative Cost Estimate

Description	Unit	Estimated Quantity	Unit Price	Extension	
Mobilization/Demobilization	L.S.	1	\$20,000	\$20,000	10% of project cost
Erosion Control	L.S.	1	\$12,000	\$12,000	
Clearing and Grubbing	L.S.	0	\$5,000	\$0	
Floatation Silt Curtain	L.F.	70	\$15	\$1,019	
Control of Water, Dewatering	L.S.	1	\$15,000	\$15,000	
Pond Dredging of MPCA Dredged Material Level 1- Removal and Disposal	C.Y.	4,090	\$38	\$155,420	10' width
Pond Dredging of MPCA Dredged Material Level 3- Removal and Disposal	C.Y.	0	\$70	\$0	
Site Grading	S.Y.	1,300	\$4	\$5,200	
Top Soil Borrow	C.Y.	108	\$26	\$2,817	
Flexterra HP-FGM	S.Y.	1,300	\$5	\$6,500	
Trail Replacement	S.Y.	0	\$30	\$0	
Traffic Control/Pedestrian Control/Trail Closure	L.S.	1	\$2,000	\$2,000	
Subtotal				\$219,955	
Contingency (30%)				\$65,987	
Total				\$285,942	
Engineering (30%)				\$65,987	
Total w/Engineering				\$351,928	

Erosion Control				
Item	Unit	Est. Quanti	Unit Price	Extension
Erosion Control Construction Entrance	Each	1	1,045.00	1045
Street Sweeping	L.S.	1	1,000.00	1000
Inlet Protection	Each	4	194.00	776
Erosion Control Siltation Logs	L.F.	1200	7.50	9000
Total				11821

Restoration (3 access points, 24' wide, 50' long, one 260'x24' access to ne corner) 1293.333 SY

30-yr and Annualized Cost analysis			
Estimated life span (years)	20		
Expected annual maintenance	\$ -		
End of life span maintenance	\$ 80,000	based on sediment accumulation rate of 10 CY per year (fromP8 model)	
Future Capital Cost	\$ 854,200		
Future annual maintenance	\$ -		
Future end of life span cost	\$ 195,000		
Total Future Worth	\$ 1,049,200		
Annualized Cost	\$ 22,100		

Table F-7. Winnetka Pond East - Alternate 2 Cost Estimate

Description	Unit	Estimated Quantity	Unit Price	Extension	
Mobilization/Demobilization	L.S.	1	\$51,700	\$51,700	10% of project cost
Erosion Control	L.S.	1	\$12,000	\$12,000	
Clearing and Grubbing	L.S.	0	\$5,000	\$0	
Floatation Silt Curtain	L.F.	70	\$15	\$1,019	
Control of Water, Dewatering	L.S.	1	\$15,000	\$15,000	
Pond Dredging of MPCA Dredged Material Level 1- Removal and Disposal	C.Y.	12,422	\$38	\$472,036	bottom elev 875.9 (4.2 ft deep)
Pond Dredging of MPCA Dredged Material Level 3- Removal and Disposal	C.Y.	0	\$70	\$0	
Site Grading	S.Y.	1,300	\$4	\$5,200	
Top Soil Borrow	C.Y.	108	\$26	\$2,817	10' width
Flexterra HP-FGM	S.Y.	1,300	\$5	\$6,500	
Trail Replacement	S.Y.	0	\$30	\$0	
Traffic Control/Pedestrian Control/Trail Closure	L.S.	1	\$2,000	\$2,000	
Subtotal				\$568,271	
Contingency (30%)				\$170,481	
Total				\$738,753	
Engineering (30%)				\$170,481	
Total w/Engineering				\$909,234	

Erosion Control

Item	Unit	Est. Quanti	Unit Price	Extension
Erosion Control Construction Entrance	Each	1	1,045.00	1045
Street Sweeping	L.S.	1	1,000.00	1000
Inlet Protection	Each	4	194.00	776
Erosion Control Siltation Logs	L.F.	1200	7.50	9000

Total

11821

Restoration (3 access points, 24' wide, 50' long, one 260'x24' access to ne corner)

1293.333 SY

30-yr and Annualized Cost analysis

Estimated life span (years)	30	
Expected annual maintenance	\$ -	
End of life span maintenance	\$ 80,000	based on sediment accumulation rate of 10 CY per year (fromP8 model)
Future Capital Cost	\$ 2,206,900	
Future annual maintenance	\$ -	
Future end of life span cost	\$ 195,000	
Total Future Worth	\$ 2,401,900	
Annualized Cost	\$ 50,500	