



Civil Design Associates, Inc.

Consulting Engineers - Surveyors

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West Brook Estates, Phase 4
Opinion of Probable Construction Cost
December, 2015

C# 9063

Item Description	Qty.	Unit	Unit Price	Total
Phase 4A				\$707,720.50
Phase 4B				\$616,737.00
Miscellaneous				
Mobilization	1	Lump	\$5,000.00	\$5,000.00
Construction Staking	1	Lump	\$26,000.00	\$26,000.00
Erosion Control	1	Lump	\$5,000.00	\$5,000.00
TOTAL				\$1,360,457.50

West Brook Estates
Phase 4A
Opinion of Probable Construction Cost
12/30/2015

Item No.	Estimated Quantity	Units	Description	Unit Cost	Total Amount
Water					
1	1646	L.F.	8" Class 52 DIP (Polyethylene wrap)	\$80.00	\$131,680.00
2	3	EACH	Fire Hydrant Assembly	\$3,000.00	\$9,000.00
3	6	EACH	8" Gate Valve w/ Valve Box	\$1,250.00	\$7,500.00
4	29	EACH	8" Service Saddle - 3/4" Tapered Thread	\$80.00	\$2,320.00
5	29	EACH	3/4" Corporation Stop	\$350.00	\$10,150.00
6	29	EACH	3/4" Curb Stop & Box	\$275.00	\$7,975.00
7	582	L.F.	3/4" Type K Copper Service Line	\$25.00	\$14,550.00
8	0	C.Y.	Granular Backfill (Accounted for in Conduit Cost)	\$25.00	\$0.00
Water Subtotal:					\$183,175.00
Sanitary Sewer					
9	674	L.F.	8" PVC Gravity Sewer, Type B	\$30.00	\$20,220.00
10	588	L.F.	6" PVC Sewer Service Lateral, Type B	\$20.00	\$11,760.00
11	3	EACH	Precast Manhole, 8' to 12'	\$2,400.00	\$7,200.00
12	0	C.Y.	Granular Backfill (Accounted for in Conduit Cost)	\$25.00	\$0.00
Sanitary Sewer Subtotal:					\$39,180.00
Storm Sewer					
13	735	L.F.	12" HDPE N-12 Storm Sewer, Type B	\$45.00	\$33,075.00
14	602	L.F.	15" HDPE N-12 Storm Sewer, Type B	\$55.00	\$33,110.00
15	405	L.F.	18" HDPE N-12 Storm Sewer, Type B	\$65.00	\$26,325.00
16	226	L.F.	24" HDPE N-12 Storm Sewer, Type B	\$75.00	\$16,950.00
17	70	L.F.	30" HDPE N-12 Storm Sewer, Type C	\$85.00	\$5,950.00
18	480	L.F.	6" PE Storm Sewer Service Lateral	\$15.00	\$7,200.00
19	6	EACH	Precast Manhole, Under 8'	\$2,000.00	\$12,000.00
20	19	EACH	ODOT Catch Basin Type 3A	\$2,200.00	\$41,800.00
21	1	EACH	Headwall Type HW-D	\$850.00	\$850.00
22	1	EACH	Detention Basin Outlet Structure	\$2,500.00	\$2,500.00
23	0	C.Y.	Granular Backfill (Accounted for in Conduit Cost)	\$25.00	\$0.00
24	11	C.Y.	Rock Channel Protection (Riprap)	\$75.00	\$825.00
25	LUMP	SUM	Detention Basin Embankment and Excavation	\$25,000.00	\$25,000.00
26	1500	S.Y.	Detention Basin Seeding and Mulching	\$1.00	\$1,500.00
Storm Sewer Subtotal:					\$207,085.00
Roadway					
27	466	C.Y.	Item 203 Embankment	\$9.00	\$4,194.00
28	5426	C.Y.	Item 203 Excavation	\$4.00	\$21,704.00
29	5132	S.Y.	Item 203.13 Compacted Subgrade	\$2.00	\$10,264.00
30	571	C.Y.	Item 301 4" Bituminous Aggregate Base	\$120.00	\$68,520.00
31	856	C.Y.	Item 304 6" Aggregate Base	\$40.00	\$34,240.00
32	2053	Gal.	Item 407 Tack Coat (@ 0.4 Gal./S.Y.)	\$2.00	\$4,106.00
33	2053	Gal.	Item 408 Prime Coat (@ 0.4 Gal./S.Y.)	\$3.50	\$7,185.50
34	214	C.Y.	Item 448 1.5" Asphalt Concrete	\$135.00	\$28,890.00
35	3148	L.F.	Item 605 4" Unclassified Pipe Underdrain	\$12.00	\$37,776.00
36	50	L.F.	Guardrail, Type 5	\$12.50	\$625.00
37	332	S.F.	Item 608 Curb Ramp	\$12.00	\$3,984.00
38	60	S.F.	Item 608 Detectable Warning	\$22.50	\$1,350.00
39	0	S.F.	Item 608 4' Sidewalk (Responsibility of Homeowner)	\$4.00	\$0.00
40	3148	L.F.	Item 609 Massillon Standard Curb and Gutter	\$16.00	\$50,368.00
41	1924	S.Y.	Item 659 Seeding and Mulching	\$1.00	\$1,924.00
42	6	EACH	Monument Assembly	\$525.00	\$3,150.00
Roadway Subtotal:					\$278,280.50
Phase 4A Subtotal:					\$707,720.50

West Brook Estates
Phase 4B
Opinion of Probable Construction Cost
12/30/2015

Item No.	Estimated Quantity	Units	Description	Unit Cost	Total Amount
Water					
1	989	L.F.	8" Class 52 DIP (Polyethylene wrap)	\$80.00	\$79,120.00
2	467	L.F.	2" HDPE SDR 9 PE 3408	\$25.00	\$11,675.00
3	2	EACH	Fire Hydrant Assembly	\$3,000.00	\$6,000.00
4	1	EACH	8" Blow-Off Assembly	\$350.00	\$350.00
5	2	EACH	2" Blow-Off Assembly	\$250.00	\$500.00
6	4	EACH	8" Gate Valve w/ Valve Box	\$1,250.00	\$5,000.00
7	21	EACH	8" Service Saddle - 3/4" Tapered Thread	\$80.00	\$1,680.00
8	21	EACH	3/4" Corporation Stop	\$350.00	\$7,350.00
9	23	EACH	3/4" Curb Stop & Box	\$275.00	\$6,325.00
10	338	L.F.	3/4" Type K Copper Service Line	\$25.00	\$8,450.00
11	0	C.Y.	Granular Backfill (Accounted for in Conduit Cost)	\$25.00	\$0.00
Water Subtotal:					\$126,450.00
Sanitary Sewer					
12	501	L.F.	8" PVC Gravity Sewer, Type B	\$30.00	\$15,030.00
13	779	L.F.	6" PVC Sewer Service Lateral, Type B	\$20.00	\$15,580.00
14	4	EACH	Precast Manhole, 8' to 12'	\$2,400.00	\$9,600.00
15	1	EACH	Manhole w/ Outside Drop	\$3,600.00	\$3,600.00
16	1	EACH	Manhole, Adjusted to Grade and Outside Drop Added	\$1,250.00	\$1,250.00
17	1	EACH	Manhole, Outside Drop Added	\$1,000.00	\$1,000.00
18	0	C.Y.	Granular Backfill (Accounted for in Conduit Cost)	\$25.00	\$0.00
Sanitary Sewer Subtotal:					\$46,060.00
Storm Sewer					
19	508	L.F.	12" HDPE N-12 Storm Sewer, Type B	\$45.00	\$22,860.00
20	30	L.F.	15" HDPE N-12 Storm Sewer, Type B	\$55.00	\$1,650.00
21	118	L.F.	18" HDPE N-12 Storm Sewer, Type B	\$65.00	\$7,670.00
22	490	L.F.	24" HDPE N-12 Storm Sewer, Type B	\$75.00	\$36,750.00
23	35	L.F.	30" HDPE N-12 Storm Sewer, Type B	\$95.00	\$3,325.00
24	35	L.F.	30" HDPE N-12 Storm Sewer, Type C	\$85.00	\$2,975.00
25	150	L.F.	36" HDPE N-12 Storm Sewer, Type B	\$120.00	\$18,000.00
26	175	L.F.	6" PE Storm Sewer Service Lateral	\$15.00	\$2,625.00
27	1	EACH	Precast Manhole, Under 8'	\$2,000.00	\$2,000.00
28	3	EACH	Precast Manhole, 8' to 12'	\$2,400.00	\$7,200.00
29	10	EACH	ODOT Catch Basin Type 3A	\$2,200.00	\$22,000.00
29	1	EACH	Headwall, Type HW-D	\$850.00	\$850.00
30	2	EACH	Headwall, Type 1.1	\$8,500.00	\$17,000.00
30	1	EACH	Detention Basin Outlet Structure	\$2,500.00	\$2,500.00
31	0	C.Y.	Granular Backfill (Accounted for in Conduit Cost)	\$25.00	\$0.00
32	22	C.Y.	Rock Channel Protection (Riprap)	\$75.00	\$1,650.00
33	Lump	Sum	Detention Basin Embankment and Excavation	\$25,000.00	\$25,000.00
34	2000	S.Y.	Detention Basin Seeding and Mulching	\$1.00	\$2,000.00
Storm Sewer Subtotal:					\$176,055.00
Roadway					
35	2753	C.Y.	Item 203 Embankment	\$9.00	\$24,777.00
36	6293	C.Y.	Item 203 Excavation	\$4.00	\$25,172.00
37	4564	S.Y.	Item 203.13 Compacted Subgrade	\$2.00	\$9,128.00
38	508	C.Y.	Item 301 4" Bituminous Aggregate Base	\$120.00	\$60,960.00
39	761	C.Y.	Item 304 6" Aggregate Base	\$40.00	\$30,440.00
40	1826	Gal.	Item 407 Tack Coat (@ 0.4 Gal./S.Y.)	\$2.00	\$3,652.00
41	1826	Gal.	Item 408 Prime Coat (@ 0.4 Gal./S.Y.)	\$3.50	\$6,391.00
42	191	C.Y.	Item 448 1.5" Asphalt Concrete	\$135.00	\$25,785.00
43	2517	L.F.	Item 605 4" Unclassified Pipe Underdrain	\$12.00	\$30,204.00
44	221	S.F.	Item 608 Curb Ramp	\$12.00	\$2,652.00
45	40	S.F.	Item 608 Detectable Warning	\$22.50	\$900.00
46	0	S.F.	Item 608 4' Sidewalk (Responsibility of Homeowner)	\$4.00	\$0.00
47	2517	L.F.	Item 609 Massillon Standard Curb and Gutter	\$16.00	\$40,272.00
48	1539	S.Y.	Item 659 Seeding and Mulching	\$1.00	\$1,539.00
49	12	EACH	Monument Assembly	\$525.00	\$6,300.00
Roadway Subtotal:					\$268,172.00
Phase 4B Subtotal:					\$616,737.00