



Independence Filing No. 1
Engineers Estimate of Cost

CORE Project #15-054
4/27/2017

NEIGHBORHOOD 1 - ON-SITE BONDED COSTS

Description	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Total
SITE CLEARING, DEMO, GRADING & EROSION CONTROL	\$ 439,032	\$ 380,494	\$ 257,910	\$ 249,646	\$ 535,103	\$ 675,248	\$ 447,985	\$ 2,985,418
STORM SEWER	\$ 13,784	\$ 143,522	\$ -	\$ 26,432	\$ -	\$ 113,836	\$ 44,763	\$ 342,337
LOCAL ROADS	\$ 298,342	\$ 255,441	\$ 156,792	\$ 168,170	\$ 342,284	\$ 310,566	\$ 270,106	\$ 1,801,702
TOTAL BONDED ON-SITE COSTS	\$ 751,158	\$ 779,457	\$ 414,702	\$ 444,248	\$ 877,387	\$ 1,099,651	\$ 762,854	\$ 5,129,457



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CORE Project #15-054
4/27/2017

Description	OFF-SITE COSTS			
	Phase A	Phase B	Phase C1	Phase C2
TOTAL BONDED OFF-SITE COSTS	\$ 1,220,180	\$ 201,023	\$ 4,250,000	\$ 4,050,000

Notes

1. Phase 1 Includes Accl/Decel lanes on CR158 and the paving of CR-5 starting from the intersection of CR-158 and CR-5 north to the intersection of CR-5 and Road A.
2. Phase 2 Includes asphalt paving operations for the portion of CR-5 starting at the intersection of CR-5 and Road A and continuing north to CR-5 and Road B.
3. Phase 3 Option A includes the remainder of CR5 to Delbert Rd and paving Delbert Rd north to Singing Hills Rd. Phase 3 Option B includes the remainder of CR5 to Delbert Rd and paving Delbert Rd south to CR158.

Cost Summary

Site Clearing, Demo, Grading & Erosion Control	\$3,271,219
Sanitary Sewer	\$1,429,736
Storm Sewer	\$1,114,674
Water Supply	\$1,588,976
Irrigation System	\$954,307
Hancock Blvd Roadway Improvements	\$417,448
Hilltop Rd. Accl-Decel Lanes	\$476,861
Local Roads 32' Flowline To Flowline	\$1,855,393
Aggregate Roads	\$206,020
GRAND TOTAL	\$11,108,614

Note this estimate does not includes costs for:

Phasing

Water Resource and Recovery Facility

Water Treatment Facility

Item	Unit Cost	Unit	Quantity	Cost
SITE CLEARING, DEMO, GRADING & EROSION CONTROL				
Site Demo & Grading				
Layout and Surveying	\$ 200.00	DU	327	\$ 65,400.00
Site Demo	\$ 50,000.00	LS	1	\$ 50,000.00
Clearing, Grubbing & Site Prep	\$ 0.02	SF	4,140,000	\$ 82,800.00
Strip and Stockpile Topsoil (4")	\$ 1.95	CY	51,100	\$ 99,645.00
Cut to Fill/Stockpile (Prelim Qtys provided by CORE)	\$ 2.25	CY	641,832	\$ 1,444,122.00
Over Excavation of Lots - EXCLUDED	\$ -	CY	0	\$ -
Roadway Overexcavation - 3' (Assumes 60% of roads)	\$ 2.13	CY	38,000	\$ 80,940.00
Spread Topsoil	\$ 2.25	CY	51,100	\$ 114,975.00
Misc. Site Grading	\$ 250.00	EA	327	\$ 81,750.00
Traffic Control - CR158	\$ 950.00	DY	24	\$ 22,800.00
Earthwork Mobilization	\$ 41,294.29	EA	3	\$ 123,882.87
Total Site Demo & Grading				\$ 2,166,314.87
Erosion Control				
3rd Party Erosion Control Consultant	\$ 500.00	MO	24	\$ 12,000.00
Concrete Washout (CWA)	\$ 2,500.00	EA	1	\$ 2,500.00
Diversion Ditch (DD)	\$ 1.60	LF	6,552	\$ 10,483.20
Dust Control	\$ 500.00	MO	24	\$ 12,000.00
Erosion Control Blanket (ECB)	\$ 5.00	SY	55,822	\$ 279,110.00
Erosion Control Maintenance	\$ 3,200.00	MO	24	\$ 76,800.00
Inlet Protection (IP)	\$ 350.00	EA	24	\$ 8,400.00
Outlet Protection (Reinforced Rock Berm)	\$ 530.00	EA	5	\$ 2,650.00
Sediment Basins (SB)	\$ 2,500.00	EA	10	\$ 25,000.00
Sediment Control Log (SCL)	\$ 2.00	LF	880	\$ 1,760.00
Seeding and Mulching (SM)	\$ 1,250.00	AC	95.4	\$ 119,250.00
Silt Fence - Perimeter Protection (SF)	\$ 1.25	LF	21,570	\$ 26,962.50
Stablized Staging Area (SSA)	\$ 2.00	SY	2,500	\$ 5,000.00
Storm Water Documentation Setup	\$ 2,750.00	EA	3	\$ 8,250.00
Storm Water Permits	\$ 850.00	EA	3	\$ 2,550.00
Street Sweeper & Operator (5x per Month)	\$ 1,800.00	MO	24	\$ 43,200.00
Surface Roughening (SR)	\$ 200.00	AC	95.4	\$ 19,080.00
Temporary Seeding	\$ 975.00	AC	95.4	\$ 93,015.00
Vehicle Tracking Control Pad Maintenance	\$ 196.60	HR	240	\$ 47,184.00
Vehicle Tracking Control (VTC)	\$ 2,442.00	EA	3	\$ 7,326.00
Mobilization	\$ 5,000.00	LS	1	\$ 5,000.00
Total Erosion Control				\$ 807,520.70
10% Phasing Contingency				\$ 297,383.56
Total Site Clearing, Demo, Grading & Erosion Control				\$ 3,271,219.13

Item	Unit Cost	Unit	Quantity	Cost
<u>SANITARY SEWER</u>				
NOTE: This estimate does not include cost for the Water Resource and Recovery Facility				
Sanitary Sewer Services				
Utility Mobilization	\$ 10,000.00	EA	3	\$ 30,000.00
4" PVC SS Service Laterals	\$ 1,029.00	EA	327	\$ 336,483.00
8" PVC SDR 35 Mainline	\$ 32.70	LF	12,858	\$ 420,456.60
10" PVC SDR 35 Mainline	\$ 47.70	LF	3,828	\$ 182,595.60
8" PVC SDR 25 Mainline	\$ 50.00	LF	323	\$ 16,150.00
10" PVC SDR 25 Mainline	\$ 57.00	LF	1,157	\$ 65,949.00
SS Manhole (4' Dia.)	\$ 2,522.00	EA	141	\$ 355,602.00
SS Manhole (5' Dia.)	\$ 4,500.00	EA	5	\$ 22,500.00
SS Outside Drop Manhole (5' Dia.)	\$ 6,500.00	EA	1	\$ 6,500.00
Total Sanitary Sewer				\$ 1,429,736.20
<u>STORM SEWER</u>				
Storm Sewer (SIA)				
48" RCP	\$ 177.00	LF	0	\$ -
36" RCP	\$ 112.00	LF	648	\$ 72,576.00
30" RCP	\$ 85.40	LF	380	\$ 32,452.00
24" RCP	\$ 68.50	LF	1,713	\$ 117,340.50
18" RCP	\$ 47.70	LF	2,442	\$ 116,483.40
6' Dia. SD Manhole	\$ 3,147.00	EA	1	\$ 3,147.00
5' Dia. SD Manhole	\$ 2,461.00	EA	15	\$ 36,915.00
Type C Inlet	\$ 3,390.00	EA	7	\$ 23,730.00
5' Type R Inlet	\$ 5,000.00	EA	8	\$ 40,000.00
10' Type R Inlet	\$ 7,500.00	EA	5	\$ 37,500.00
15' Type R Inlet	\$ 9,500.00	EA	5	\$ 47,500.00
Type L Rip Rap	\$ 87.50	CY	0	\$ -
7'x5' RCC Box Culvert	\$ 600.00	LF	106	\$ 63,600.00
Box Culvert Headwalls	\$ 6,000.00	EA	2	\$ 12,000.00
Total Storm Sewer (SIA)				\$ 603,243.90
Storm Sewer (NON SIA)				
36" RCP	\$ 112.00	LF		\$ -
30" RCP	\$ 85.40	LF	709	\$ 60,548.60
24" RCP	\$ 68.50	LF	359	\$ 24,591.50
18" RCP	\$ 47.70	LF	164	\$ 7,822.80
36" FES	\$ 1,925.00	EA	0	\$ -
24" FES	\$ 1,208.00	EA	2	\$ 2,416.00
Channel Drop Structures	\$ 12,500.00	EA	9	\$ 112,500.00
Channel Revegetation (Coir ECB, Seeding, Irrigation)	\$ 8.00	SY	10,000	\$ 80,000.00
Grass Lined Swales	\$ 21.50	LF	0	\$ -
Concrete Trickle Channel	\$ 40.00	LF	720	\$ 28,800.00
Pond Outfall Structure	\$ 12,835.00	EA	5	\$ 64,175.00
Forebay	\$ 17,000.00	EA	5	\$ 85,000.00
Type M Rip Rap (no grouted)	\$ 55.00	CY	2,301	\$ 126,555.00
Type VL Rip Rap	\$ 40.00	CY	360	\$ 14,400.00
Total Storm Sewer (NON SIA)				\$ 511,430.00
Total Storm Sewer				\$ 1,114,673.90

Item	Unit Cost	Unit	Quantity	Cost
<u>WATER SUPPLY</u>				
NOTE: This estimate does not include costs for the Water Treatment Facility				
Water Main				
8" PVC C900	\$ 31.00	LF	17,208	\$ 533,448.00
16" PVC C900	\$ 95.00	LF	869	\$ 82,555.00
3/4" Water Services	\$ 1,481.00	EA	327	\$ 484,287.00
8" Tees	\$ 618.00	EA	40	\$ 24,720.00
16" Tees	\$ 1,800.00	EA	2	\$ 3,600.00
8" Bends	\$ 359.00	EA	124	\$ 44,516.00
16" Bends	\$ 800.00	EA	3	\$ 2,400.00
8" Cross	\$ 630.00	EA	2	\$ 1,260.00
8" Gave Valve	\$ 1,912.00	EA	94	\$ 179,728.00
8" Lowerings	\$ 2,768.00	EA	2	\$ 5,536.00
Air Vac Assembly with 60" Manholes	\$ 4,925.00	EA	2	\$ 9,850.00
8" Plug & Blow Off Assembly	\$ 1,921.00	EA	4	\$ 7,684.00
16" Plug & Blow Off Assembly	\$ 3,000.00	EA	1	\$ 3,000.00
8" x 6" Reducer	\$ 450.00	EA	1	\$ 450.00
16" x 8" Reducer	\$ 950.00	EA	2	\$ 1,900.00
Fire Hydrants	\$ 6,582.00	EA	31	\$ 204,042.00
Total Water Supply				\$ 1,588,976.00
<u>IRRIGATION SYSTEM</u>				
4" PCV C900	\$ 22.00	LF	8,556	\$ 188,232.00
6" PVC C900	\$ 27.00	LF	0	\$ -
8" PCV C900	\$ 31.00	LF	7,628	\$ 236,468.00
10" PVC C900	\$ 45.00	LF	626	\$ 28,170.00
12" PVC C900	\$ 55.00	LF	469	\$ 25,795.00
4" Tees	\$ 400.00	EA	3	\$ 1,200.00
8" Tees	\$ 618.00	EA	4	\$ 2,472.00
8" x 4" Tees	\$ 500.00	EA	5	\$ 2,500.00
12" x 8" Tees	\$ 800.00	EA	1	\$ 800.00
4" Bends	\$ 250.00	EA	66	\$ 16,500.00
8" Bends	\$ 359.00	EA	54	\$ 19,386.00
12" Bends	\$ 750.00	EA	3	\$ 2,250.00
8" Cross	\$ 630.00	EA	2	\$ 1,260.00
4" Gate Valve	\$ 1,500.00	EA	9	\$ 13,500.00
8" Gate Valve	\$ 1,912.00	EA	21	\$ 40,152.00
12" Gate Valve	\$ 2,200.00	EA	2	\$ 4,400.00
4" Lowerings	\$ 1,800.00	EA	2	\$ 3,600.00
Air Vac Assembly with 60" Manholes	\$ 4,925.00	EA	2	\$ 9,850.00
4" Plug & Blow Off Assembly	\$ 1,800.00	EA	2	\$ 3,600.00
8" Plug & Blow Off Assembly	\$ 1,921.00	EA	2	\$ 3,842.00
10" Plug & Blow Off Assembly	\$ 2,200.00	EA	2	\$ 4,400.00
8" x 4" Reducer	\$ 450.00	EA	8	\$ 3,600.00
10" x 4" Reducer	\$ 900.00	EA	1	\$ 900.00
12" x 10" Reducer	\$ 800.00	EA	1	\$ 800.00
3/4" Irrigation Water Services	\$ 1,481.00	EA	230	\$ 340,630.00
Total Irrigation System				\$ 954,307.00

Item	Unit Cost	Unit	Quantity	Cost
HANCOCK BLVD ROADWAY IMPROVEMENTS				
Asphalt Paving / Pavement Markings				
12" Scarify/ Recompact Subgrade	\$ 2.25	SY	20,435	\$ 45,978.75
Fine Grade	\$ 0.69	SY	23,825	\$ 16,439.25
Weed Control	\$ 0.20	SY	23,825	\$ 4,765.00
Asphalt Paving - 6" (Per CTL Report)	\$ 25.50	SY	11,500	\$ 293,250.00
Pavement Striping	\$ 15.00	LF	2,322	\$ 34,830.00
Pavement Markings (turn arrows, bicycle markings, etc)	\$ 500.00	EA	11	\$ 5,500.00
Total Asphalt Paving / Pavement Markings				\$ 400,763.00
Site Concrete				
Concrete Mobilization	\$ 4,500.00	EA	2	\$ 9,000.00
Subgrade Prep Site Concrete	\$ 1.00	SY	0	\$ -
2.5' Vertical Curb and Gutter	\$ 16.00	LF	0	\$ -
1.5' Vertical Median Curb and Gutter	\$ 14.50	LF	530	\$ 7,685.00
Raised Median Curb	\$ 14.50	LF	0	\$ -
Corner Ramps	\$ 1,650.00	EA	0	\$ -
Mid Block Ramps	\$ 1,250.00	EA	0	\$ -
5' Sidewalks	\$ 23.00	LF	0	\$ -
Total Site Concrete				\$ 16,685.00
Total Hancock Blvd Roadway Improvements				\$ 417,448.00
HILLTOP RD. Accl-Decel Lanes				
12" Scarify/ Recompact Subgrade	\$ 2.25	SY	13,000	\$ 29,250.00
Fine Grade	\$ 0.69	SY	13,000	\$ 8,970.00
Weed Control	\$ 0.20	SY	13,000	\$ 2,600.00
4' Aggregate Shoulder (9")	\$ 17.15	SY	1,410	\$ 24,181.50
Asphalt Paving - 9"	\$ 38.55	SY	7,890	\$ 304,159.50
Asphalt Mobilizations	\$ 2,500.00	EA	1	\$ 2,500.00
Pavement Striping	\$ 15.00	LF	6,780	\$ 101,700.00
Pavement Markings (turn arrows, bicycle markings, etc)	\$ 500.00	EA	7	\$ 3,500.00
Total HILLTOP RD. Accl-Decel Lanes				\$ 476,861.00

Item	Unit Cost	Unit	Quantity	Cost
LOCAL ROADS - 32' FLOWLINE TO FLOWLINE				
Asphalt Paving / Pavement Markings				
Asphalt Mobilizations	\$ 2,500.00	EA	3	\$ 7,500.00
12" Scarify/ Recompact Subgrade	\$ 2.25	SY	74,705	\$ 168,086.25
Fine Grade	\$ 0.69	SY	74,705	\$ 51,546.45
Weed Control	\$ 0.20	SY	74,705	\$ 14,941.00
4' Aggregate Shoulder (7.5")	\$ 27.50	SY	0	\$ -
Asphalt Paving - 5" (Per CTL Report)	\$ 22.50	SY	47,210	\$ 1,062,225.00
Stop Sign with Road Names	\$ 400.00	EA	28	\$ 11,200.00
No Parking Sign	\$ 400.00	EA	6	\$ 2,400.00
Misc Signs	\$ 500.00	EA	8	\$ 4,000.00
Adjustment Manholes	\$ 450.00	EA	0	\$ -
Adjustment Water valves	\$ 225.00	EA	0	\$ -
Total Asphalt Paving / Pavement Markings				\$ 1,321,898.70
Site Concrete				
Layout	\$ 2.00	LF	0	\$ -
Concrete Mobilization	\$ 4,500.00	EA	1	\$ 4,500.00
Mountable Curb Gutter	\$ 18.25	LF	28,986	\$ 528,994.50
5' Sidewalks with Prep	\$ 25.00	LF	0	\$ -
Corner Ramps	\$ 1,650.00	EA	0	\$ -
Mid Block Ramps	\$ 1,250.00	EA	0	\$ -
Total Site Concrete				\$ 533,494.50
Total Local Roads				\$ 1,855,393.20
Aggregate Roads (Emergency Road Access & East Access Road)				
Layout	\$ 2.00	LF	2,840	\$ 5,680.00
12" Scarify/ Recompact Subgrade	\$ 2.50	SY	9,464	\$ 23,660.00
6" Class 6 Aggregate Base	\$ 28.00	SY	6,310	\$ 176,680.00
Total Aggregate Roads				\$ 206,020.00
GRAND TOTAL				\$ 11,108,614.43