

Project: Vogel Road Improvements - Phase 1 & 2  
 Federal Project #: STP-5403(644,643)  
 Bid Opening: July 14, 2015  
 Engineer's Estimate Phase 1: \$832,531.80  
 Engineer's Estimate Phase 2: \$482,423.20  
 Total Engineer's Estimate: \$1,314,955.00

					Engineers Estimate		KCI CONSTRUCTION CO. 10315 LAKE BLUFF DR. ST. LOUIS, MO 63123		KOZENY-WAGNER, INC. 951 W. OUTER ROAD ARNOLD, MO 63010		PACE CONSTRUCTION CO. 1620 WOODSON ROAD ST. LOUIS, MO 63114		GERSHENSON CONSTRUCTION 2 TRUITT DRIVE EUREKA MO 63025		UNITED IRONWORKERS, INC. 5656 STATE ROUTE 4, P.O. BOX 186 STEELEVILLE, IL 62288	
VOGEL ROAD IMPROVEMENTS PHASE 1 STP-5403 (644)																
ITEM NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL	UNIT COST	TOTAL	UNIT COST	TOTAL	UNIT COST	TOTAL	UNIT COST	TOTAL	UNIT COST	TOTAL	
<b>ROADWAY ITEMS:</b>																
2013000	CLEARING AND GRUBBING	AC	0.6	\$10,000.00	\$6,000.00	\$9,250.00	\$5,550.00	\$21,410.00	\$12,846.00	\$31,225.38	\$18,735.23	\$30,000.00	\$18,000.00	\$11,000.00	\$6,600.00	
2022010	REMOVAL OF IMPROVEMENTS	LS	1	\$60,000.00	\$60,000.00	\$35,000.00	\$35,000.00	\$48,550.00	\$48,550.00	\$35,000.00	\$35,000.00	\$35,000.00	\$35,000.00	\$45,000.00	\$45,000.00	
2031000	CLASS A EXCAVATION	CY	2058	\$20.00	\$41,160.00	\$4.75	\$9,775.50	\$14.00	\$28,812.00	\$14.74	\$30,334.92	\$17.00	\$34,986.00	\$19.25	\$39,616.50	
2035500	EMBANKMENT IN PLACE	CY	574	\$30.00	\$17,220.00	\$25.25	\$14,493.50	\$13.00	\$7,462.00	\$6.29	\$3,610.46	\$5.25	\$3,013.50	\$28.75	\$16,502.50	
2036000	COMPACTING EMBANKMENT	CY	2517	\$10.00	\$25,170.00	\$6.50	\$16,360.50	\$2.15	\$5,411.55	\$1.97	\$4,958.49	\$7.75	\$19,506.75	\$5.00	\$12,585.00	
3040504	TYPE 5 AGGREGATE BASE (4 IN. THICK)	SY	5236	\$6.00	\$31,416.00	\$3.33	\$17,435.88	\$5.28	\$27,646.08	\$5.50	\$28,798.00	\$6.50	\$34,034.00	\$4.50	\$23,562.00	
3101003	GRAVEL (A) (6 IN. THICK)	SY	145	\$20.00	\$2,900.00	\$10.25	\$1,486.25	\$10.00	\$1,450.00	\$22.00	\$3,190.00	\$28.00	\$4,060.00	\$8.00	\$1,160.00	
4011209	BITUMINOUS PAVEMENT MIXTURE PG64-22 (BP-1)	TON	566.7	\$70.00	\$39,669.00	\$72.77	\$41,238.76	\$81.75	\$46,327.73	\$76.00	\$43,069.20	\$70.50	\$39,952.35	\$76.00	\$43,069.20	
4013000	BITUMINOUS PAVEMENT MIXTURE PG64-22 (BASE)	TON	2055.5	\$60.00	\$123,330.00	\$68.26	\$140,308.43	\$72.15	\$148,304.33	\$67.00	\$137,718.50	\$65.00	\$133,607.50	\$67.00	\$137,718.50	
4071005	TACK COAT	GAL	250	\$6.00	\$1,500.00	\$7.46	\$1,865.00	\$2.65	\$662.50	\$2.45	\$612.50	\$1.00	\$250.00	\$2.45	\$612.50	
4081010	PRIME-LIQUID ASPHALT RC 70 OR MC 30	GAL	1670	\$8.00	\$13,360.00	\$5.76	\$9,619.20	\$4.00	\$6,680.00	\$3.80	\$6,346.00	\$1.00	\$1,670.00	\$3.80	\$6,346.00	
5021106	CONCRETE PAVEMENT (6 IN. NON-REINFORCED)	SY	441	\$75.00	\$33,075.00	\$46.00	\$20,286.00	\$76.00	\$33,516.00	\$65.00	\$28,665.00	\$44.00	\$19,404.00	\$49.00	\$21,609.00	
6039922	ADJUST TO GRADE SEWER CLEANOUT WITH METAL LID	EACH	1	\$600.00	\$600.00	\$500.00	\$500.00	\$200.00	\$200.00	\$412.86	\$250.00	\$250.00	\$750.00	\$750.00		
6039932	ADJUST TO GRADE GAS VALVE	EACH	1	\$500.00	\$500.00	\$1,250.00	\$1,250.00	\$850.00	\$850.00	\$545.49	\$650.00	\$650.00	\$1,200.00	\$1,200.00		
6042010	ADJUSTING MANHOLE	EACH	1	\$600.00	\$600.00	\$1,050.00	\$1,050.00	\$412.85	\$2,477.10	\$200.00	\$1,200.00	\$500.00	\$3,000.00	\$1,200.00		
6049908	ADJUST WATER SERVICE VALVE BOX TO GRADE	EACH	6	\$300.00	\$1,800.00	\$800.00	\$4,800.00	\$175.00	\$1,050.00	\$2,016.54	\$10,082.70	\$2,000.00	\$10,000.00	\$10,000.00		
6061011A	GUARDRAIL TYPE A, 7 FT. POST, 3 FT. - 1.5 IN SPACING	LF	322	\$30.00	\$9,660.00	\$28.00	\$9,016.00	\$30.15	\$9,708.30	\$28.00	\$9,016.00	\$30.25	\$9,740.50	\$28.00	\$9,016.00	
6062204A	BRIDGE ANCHOR SECTION, 6.5 FT. POSTS (SAFETY BARRIER CURB)	EACH	4	\$2,250.00	\$9,000.00	\$1,600.00	\$6,400.00	\$1,725.00	\$6,900.00	\$1,600.00	\$6,400.00	\$1,865.30	\$7,461.20	\$1,600.00	\$6,400.00	
6062300A	TRANSITION SECTION, 6.5 FT POSTS	EACH	4	\$500.00	\$2,000.00	\$400.00	\$1,600.00	\$430.00	\$1,720.00	\$400.00	\$1,600.00	\$378.10	\$1,512.40	\$400.00	\$1,600.00	
6063015	TYPE A CRASHWORTHY END TERMINAL (ET PLUS 25')	EACH	5	\$2,500.00	\$12,500.00	\$2,000.00	\$10,000.00	\$2,155.00	\$10,775.00	\$2,000.00	\$10,000.00	\$2,016.54	\$10,082.70	\$2,000.00	\$10,000.00	
6079902	REMOVAL AND RELOCATION OF MAILBOX	EACH	9	\$300.00	\$2,700.00	\$150.00	\$1,350.00	\$255.00	\$2,295.00	\$375.00	\$3,375.00	\$175.00	\$1,575.00	\$250.00	\$2,250.00	
6079903	REMOVAL AND RELOCATION OF 48" CHAIN LINK FENCE	LF	127	\$25.00	\$3,175.00	\$12.00	\$1,524.00	\$13.00	\$1,651.00	\$12.00	\$1,524.00	\$25.21	\$3,201.67	\$12.00	\$1,524.00	
6079904	REMOVAL AND RELOCATION OF 54" THREE-RAIL WOOD FENCE	LF	161	\$25.00	\$4,025.00	\$12.00	\$1,932.00	\$13.00	\$2,093.00	\$12.00	\$1,932.00	\$22.18	\$3,570.98	\$12.00	\$1,932.00	
6079905	REMOVAL AND REPLACEMENT OF 48" WOOD PRIVACY FENCE	LF	17	\$75.00	\$1,275.00	\$42.00	\$714.00	\$45.00	\$765.00	\$42.00	\$714.00	\$28.23	\$479.91	\$42.00	\$714.00	
6092031	CONCRETE CURB LOW PROFILE TYPE E	LF	144	\$25.00	\$3,600.00	\$10.00	\$1,440.00	\$18.65	\$2,685.60	\$15.00	\$2,160.00	\$25.00	\$3,600.00	\$17.50	\$2,520.00	
6096020	FURNISHING TYPE 2 ROCK DITCH LINER	CY	139	\$28.00	\$3,892.00	\$30.00	\$4,170.00	\$30.15	\$4,190.85	\$25.93	\$3,604.27	\$39.00	\$5,421.00	\$31.20	\$4,336.80	
6096040A	FURNISHING TYPE 4 ROCK DITCH LINER	CY	112	\$30.00	\$3,360.00	\$30.00	\$3,360.00	\$30.15	\$3,376.80	\$32.16	\$3,601.92	\$42.00	\$4,704.00	\$37.15	\$4,160.80	
6096042	PLACING TYPE 2 ROCK DITCH LINER	CY	139	\$24.00	\$3,336.00	\$25.00	\$3,475.00	\$32.30	\$4,489.70	\$18.91	\$2,628.49	\$20.50	\$2,849.50	\$22.50	\$3,127.50	
6096044	PLACING TYPE 4 ROCK DITCH LINER	CY	112	\$22.00	\$2,464.00	\$25.00	\$2,800.00	\$32.30	\$3,617.60	\$12.79	\$1,432.48	\$25.50	\$2,856.00	\$28.00	\$3,136.00	
6096050	BEDDING MATERIAL FOR ROCK DITCH LINER	CY	45	\$40.00	\$1,800.00	\$40.00	\$1,800.00	\$55.00	\$2,475.00	\$33.87	\$1,524.15	\$31.00	\$1,395.00	\$79.35	\$3,570.75	
6113020	FURNISHING TYPE 2 ROCK BLANKET	CY	212	\$35.00	\$7,420.00	\$30.00	\$6,360.00	\$32.30	\$6,847.60	\$26.11	\$5,535.32	\$42.00	\$8,904.00	\$32.00	\$6,784.00	
6113040	PLACING TYPE 2 ROCK BLANKET	CY	212	\$20.00	\$4,240.00	\$25.00	\$5,300.00	\$27.00	\$5,724.00	\$14.15	\$2,999.80	\$25.00	\$5,300.00	\$21.00	\$4,452.00	
6115030A	HEAVY STONE REVETMENT	SY	4	\$60.00	\$240.00	\$85.00	\$340.00	\$110.00	\$440.00	\$177.19	\$708.76	\$200.00	\$800.00	\$1		

7071000	CONDUIT SYSTEM ON STRUCTURE	LS	1	\$1,440.00	\$1,440.00	\$4,000.00	\$4,000.00	\$7,000.00	\$7,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$3,200.00	\$3,200.00		
7151001	VERTICAL DRAIN AT END BENTS	EACH	2	\$1,600.00	\$3,200.00	\$2,600.00	\$5,200.00	\$1,600.00	\$3,200.00	\$950.00	\$1,900.00	\$1,600.00	\$3,200.00	\$1,000.00		
7161003	LAMINATED NEOPRENE BEARING PAD (TAPERED)	EACH	8	\$350.00	\$2,800.00	\$400.00	\$3,200.00	\$395.00	\$3,160.00	\$465.00	\$3,720.00	\$400.00	\$3,200.00	\$250.00		
				<b>SUBTOTAL:</b>	<b>\$128,357.50</b>			<b>\$187,298.00</b>		<b>\$220,370.80</b>		<b>\$218,773.50</b>		<b>\$226,847.50</b>		
														<b>\$196,993.50</b>		
	<b>CULVERT ITEMS:</b>															
2063300	CLASS 4 EXCAVATION	CY	150	\$25.00	\$3,750.00	\$20.00	\$3,000.00	\$42.50	\$6,375.00	\$75.00	\$11,250.00	\$37.00	\$5,550.00	\$50.00	\$7,500.00	
2163500	PARTIAL REMOVAL OF CULVERT CONCRETE	LS	1	\$10,000.00	\$10,000.00	\$6,500.00	\$6,500.00	\$6,300.00	\$6,300.00	\$5,200.00	\$5,200.00	\$4,500.00	\$4,500.00	\$3,200.00	\$3,200.00	
7034041	CLASS B-1 CONCRETE (CULVERTS)	CY	77.0	\$600.00	\$46,200.00	\$545.00	\$41,965.00	\$835.65	\$64,345.05	\$1,250.00	\$96,250.00	\$700.00	\$53,900.00	\$702.20	\$54,069.40	
7061030	REINFORCING STEEL (CULVERTS)	LBS	10880	\$1.15	\$12,512.00	\$0.95	\$10,336.00	\$1.00	\$10,880.00	\$0.01	\$108.80	\$1.10	\$11,968.00	\$1.10	\$11,968.00	
7101000	REINFORCING STEEL (EPOXY COATED)	LBS	4830	\$1.35	\$6,520.50	\$1.00	\$4,830.00	\$1.00	\$4,830.00	\$1.59	\$7,679.70	\$1.20	\$5,796.00	\$1.30	\$6,279.00	
				<b>SUBTOTAL:</b>	<b>\$78,982.50</b>			<b>\$66,631.00</b>		<b>\$92,730.05</b>		<b>\$120,488.50</b>		<b>\$81,714.00</b>		
															<b>\$83,016.40</b>	
				<b>PHASE 1 TOTAL:</b>	<b>\$832,531.80</b>			<b>\$872,900.25</b>		<b>\$905,858.99</b>		<b>\$935,320.27</b>		<b>\$875,813.00</b>		<b>\$851,089.11</b>

VOGEL ROAD IMPROVEMENTS PHASE 2 STP-5403 (643)															
ITEM NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL	UNIT COST	TOTAL	UNIT COST	TOTAL	UNIT COST	TOTAL	UNIT COST	TOTAL	UNIT COST	TOTAL
	<b>ROADWAY ITEMS:</b>														
2013000	CLEARING AND GRUBBING	AC	1.4	\$10,000.00	\$14,000.00	\$9,250.00	\$12,950.00	\$8,565.00	\$11,991.00	\$18,902.48	\$26,463.47	\$20,000.00	\$28,000.00	\$11,000.00	\$15,400.00
2022010	REMOVAL OF IMPROVEMENTS	LS	1	\$40,000.00	\$40,000.00	\$20,000.00	\$20,000.00	\$33,940.00	\$33,940.00	\$16,634.08	\$16,634.08	\$20,000.00	\$20,000.00	\$35,000.00	\$35,000.00
2031000	CLASS A EXCAVATION	CY	5304	\$20.00	\$106,080.00	\$4.75	\$25,194.00	\$10.72	\$56,858.88	\$8.60	\$45,614.40	\$14.00	\$74,256.00	\$19.99	\$106,026.96
2036000	COMPACTING EMBANKMENT	CY	3741	\$10.00	\$37,410.00	\$6.50	\$24,316.50	\$1.07	\$4,002.87	\$1.62	\$6,060.42	\$5.00	\$18,705.00	\$5.00	\$18,705.00
3040504	TYPE 5 AGGREGATE BASE (4 IN. THICK)	SY	3135	\$6.00	\$18,810.00	\$3.00	\$9,405.00	\$5.36	\$16,803.60	\$5.50	\$17,242.50	\$7.25	\$22,728.75	\$4.00	\$12,540.00
3101003	GRAVEL (A) (6 IN. THICK)	SY	311	\$20.00	\$6,220.00	\$8.50	\$2,643.50	\$10.00	\$3,110.00	\$13.50	\$4,198.50	\$23.00	\$7,153.00	\$8.00	\$2,488.00
4011209	BITUMINOUS PAVEMENT MIXTURE PG64-22 (BP-1)	TON	339.1	\$70.00	\$23,737.00	\$75.75	\$25,686.83	\$83.48	\$28,308.07	\$78.00	\$26,449.80	\$77.50	\$26,280.25	\$78.00	\$26,449.80
4013000	BITUMINOUS PAVEMENT MIXTURE PG64-22 (BASE)	TON	1348.9	\$60.00	\$80,934.00	\$65.30	\$88,083.17	\$69.57	\$93,842.97	\$65.00	\$87,678.50	\$66.50	\$89,701.85	\$65.00	\$87,678.50
4071005	TACK COAT	GAL	170	\$6.00	\$1,020.00	\$6.50	\$1,105.00	\$2.65	\$450.50	\$2.45	\$416.50	\$1.00	\$170.00	\$2.45	\$416.50
4081010	PRIME-LIQUID ASPHALT RC 70 OR MC 30	GAL	1100	\$8.00	\$8,800.00	\$4.50	\$4,950.00	\$4.00	\$4,400.00	\$3.80	\$4,180.00	\$1.00	\$1,100.00	\$3.80	\$4,180.00
6061011A	GUARDRAIL TYPE A, 7 FT. POST, 3 FT. - 1.5 IN. SPACING	LF	250	\$30.00	\$7,500.00	\$28.00	\$7,000.00	\$30.00	\$7,500.00	\$28.00	\$7,000.00	\$31.00	\$7,750.00	\$28.00	\$7,000.00
6063015	TYPE A CRASHWORTHY END TERMINAL (ET PLUS 25')	EACH	1	\$2,200.00	\$2,200.00	\$2,000.00	\$2,000.00	\$2,155.00	\$2,155.00	\$2,000.00	\$2,000.00	\$2,050.00	\$2,050.00	\$2,000.00	\$2,000.00
6079902	REMOVAL AND RELOCATION OF MAILBOX	EACH	1	\$300.00	\$300.00	\$150.00	\$150.00	\$255.00	\$255.00	\$650.00	\$650.00	\$150.00	\$150.00	\$250.00	\$250.00
6096020	FURNISHING TYPE 2 ROCK DITCH LINER	CY	252	\$28.00	\$7,056.00	\$30.00	\$7,560.00	\$30.15	\$7,597.80	\$17.68	\$4,455.36	\$35.00	\$8,820.00	\$31.20	\$7,862.40
6096040A	FURNISHING TYPE 4 ROCK DITCH LINER	CY	116	\$30.00	\$3,480.00	\$30.00	\$3,480.00	\$30.15	\$3,497.40	\$56.96	\$6,607.36	\$36.00	\$4,176.00	\$37.15	\$4,309.40
6096042	PLACING TYPE 2 ROCK DITCH LINER	CY	252	\$24.00	\$6,048.00	\$25.00	\$6,300.00	\$32.30	\$8,139.60	\$12.10	\$3,049.20	\$11.00	\$2,772.00	\$22.50	\$5,670.00
6096044	PLACING TYPE 4 ROCK DITCH LINER	CY	116	\$22.00	\$2,552.00	\$25.00	\$2,900.00	\$32.30	\$3,746.80	\$22.64	\$2,626.24	\$16.00	\$1,856.00	\$28.00	\$3,248.00
6096050	BEDDING MATERIAL FOR ROCK DITCH LINER	CY	47	\$40.00	\$1,880.00	\$40.00	\$1,880.00	\$55.00	\$2,585.00	\$68.04	\$3,197.88	\$65.00	\$3,055.00	\$79.35	\$3,729.45
6161005	CONSTRUCTION SIGNS	SF	291	\$15.00	\$4,365.00	\$8.00	\$2,328.00	\$8.60	\$2,502.60	\$8.00	\$2,328.00	\$8.00	\$2,328.00	\$10.00	\$2,910.00
6161031	TYPE III MOVEABLE BARRICADE	EACH	6	\$500.00	\$3,000.00	\$145.00	\$870.00	\$155.00	\$930.00	\$145.00	\$870.00	\$145.00	\$870.00	\$155.00	\$930.00
6181000	MOBILIZATION	LS	1	\$36,000.00	\$36,000.00	\$61,781.50	\$61,781.50	\$34,760.00	\$34,760.00	\$39,212.38	\$39,212.38	\$55,000.00	\$55,000.00	\$74,000.00	\$74,000.00
6261000A	EDGELINE RUMBLE STRIP	LF	2246	\$0.60	\$1,347.60	\$1.15	\$2,582.90	\$1.64	\$3,683.44	\$1.72	\$3,863.12	\$1.10	\$2,470.60	\$1.42	\$3,189.32
6274000	CONTRACTOR FURNISHED SURVEYING AND STAKING	LS	1	\$10,000.00	\$10,000.00	\$5,000.00	\$5,000.00	\$3,317.88	\$3,317.88	\$3,195.00	\$4,500.00	\$4,500.00	\$4,500.00	\$4,500.00	\$4,500.00
7209904	MODULAR BLOCK RETAINING WALLS														