CONSTRUCTION COST for FCD Share to Provide 3 ft of Freeboard per FCD Standards (in lieu of future FCD project to raise levees)

AGENCY: Contra Costa County Flood Control District

PROJECT: Marsh Drive Bridge Replacement over Walnut Creek Flood Control Channel

CONTRACTOR: Bridgeway Civil Constructors, Inc.



Quantities By: N. Leary (PWD) and T. Jensen (FCD)

Date: 4/26/2021

NO.	CONTRACT ITEMS	UNIT	QUANTITY	PRICE	AMOUNT
	CONSTRUCTION SURVEY AND STAKING	LS	0.05	\$70,000.00	\$3,500
	CONTRACTOR QUALITY CONTROL PLAN LEAD COMPLIANCE PLAN	LS	0.05	\$50,000.00	\$2,500
_	PROGRESS SCHEDULE (CRITICAL PATH METHOD)	LS LS	0.05	\$4,000.00 \$1,500.00	\$0 \$75
	CONSTRUCTION AREA SIGNS	LS	0.05	\$6,000.00	\$300
6	TEMPORARY TRAFFIC CONTROL SYSTEM	LS	0.05	\$100,000.00	\$5,000
	TYPE III BARRICADE	EA		\$100.00	\$0
	TEMPORARY TRAFFIC STRIPE (PAINT) CHANNELIZER (SURFACE MOUNTED)	LF.		\$2.50	\$0
	PORTABLE CHANGEABLE MESSAGE SIGNS	EA LS		\$50.00 \$40,000.00	\$0 \$0
	TEMPORARY RAILING (TYPE K)	LF		\$20.00	\$0
12	TEMPORARY CRASH CUSHION	EA		\$6,000.00	\$0
	TEMPORARY CREEK DIVERSION SYSTEM	LS		\$225,000.00	\$0
14	JOB SITE MANAGEMENT PREPARE SWPPP	LS LS	0.05	\$60,000.00 \$2,500.00	\$3,000
	RAIN EVENT ACTION PLAN	EA	0.05	\$500.00	\$125 \$0
	STORM WATER SAMPLING AND ANALYSIS, DAY	EA		\$300.00	\$0
	STORM WATER ANNUAL REPORT	EA		\$800.00	\$0
	WATER QUALITY SAMPLING AND ANALYSIS, DAY	EA		\$300.00	\$0
	WATER QUALITY MONITORING REPORT TEMPORARY HYDRAULIC MULCH	EA SQYD		\$600.00 \$2.00	\$0 \$0
	TEMPORARY CHECK DAM	LF		\$2.00 \$16.00	\$0
	TEMPORARY DRAINAGE INLET PROTECTION	EA		\$196.00	\$0
	TEMPORARY FIBER ROLL	LF		\$8.00	\$0
	TEMPORARY REINFORCED SILT FENCE	LF	3,410	\$28.00	\$95,480
	TEMPORARY CONSTRUCTION ENTRANCE TEMPORARY CONCRETE WASHOUT	EA LS		\$5,000.00 \$7,000.00	\$0 \$0
	BIRD PROTECTION MEASURES	LS		\$74,000.00	\$0
	CONTRACTOR SUPPLIED BIOLOGIST	LS		\$140,000.00	\$0
	ASBESTOS COMPLIANCE PLAN	LS		\$4,000.00	\$0
	REMOVE BOLLARDS (PRIVATE PROPERTY)	EA		\$70.00	\$0
	TEMPORARY HIGH-VISIBILITY FENCE FURNISH FIELD OFFICE	LF	0.05	\$11.00	\$0
	CLEARING AND GRUBBING	LS LS	0.05 0.05	\$72,000.00 \$30,000.00	\$3,600 \$1,500
	WATER METER CHARGES	LS	0.00	\$6,000.00	\$0
	ROADWAY EXCAVATION	CY		\$120.00	\$0
	STRUCTURE EXCAVATION (BRIDGE) (F)	CY		\$80.00	\$0
	STRUCTURE EXCAVATION (RETAINING WALL) (F) STRUCTURE BACKFILL (BRIDGE) (F)	CY	72	\$80.00 \$270.00	\$0 \$19,440
	STRUCTURE BACKFILL (RETAINING WALL) (F)	CY	213	\$125.00	\$26,625
	IMPORTED BORROW	CY	5,200	\$16.00	\$83,200
42	RESTORATION HYDROSEEDING	LS	1	\$24,000.00	\$24,000
	BONDED FIBER MATRIX WITH HYDROSEED MIX	SQFT	15,400	\$0.31	\$4,774
	FIBER ROLL	LF	2,120	\$9.00	\$19,080
	CLASS 2 AGGREGATE BASE (PARTICIPATING)	CY		\$74.00	\$0
	CLASS 2 AGGREGATE BASE (NON-PARTICIPATING) HOT MIX ASPHALT (TYPE A)	CY TON		\$74.00 \$148.00	\$0
	PLACE HOT MIX ASPHALT DIKE (TYPE A)	LF		\$32.00	\$0
	COLD PLANE ASPHALT CONCRETE PAVEMENT	SQYD		\$40.00	\$0
50	36" CAST-IN-DRILLED-HOLE CONCRETE PILING	LF		\$408.00	\$0
	PRESTRESSING CAST-IN-PLACE CONCRETE	LS		\$90,000.00	\$0
	STRUCTURAL CONCRETE, BRIDGE (F) STRUCTURAL CONCRETE, BRIDGE (POLYMER FIBER) (F)	CY		\$1,760.00 \$950.00	\$0 \$0
	STRUCTURAL CONCRETE, BRIDGE (POLYMER FIBER) (F) STRUCTURAL CONCRETE, RETAINING WALL (F)	CY	114	\$950.00	\$114,000
55	JOINT SEAL (MR 2")	LF	117	\$150.00	\$0
56	BAR REINFORCING STEEL (BRIDGE) (F)	LB		\$1.40	\$0
	BAR REINFORCING STEEL (RETAINING WALL) (F)	LB	6,650	\$1.30	\$8,645
	HEADED BAR REINFORCEMENT (F)	EΑ		\$52.00	\$0
	PEDESTRIAN BARRICADE BRIDGE REMOVAL	EA LS		\$2,704.00 \$98,000.00	\$0 \$0
	18" REINFORCED CONCRETE DRAINAGE PIPE	LF		\$170.00	\$0
	18" REINFORCED CONCRETE DRAINAGE PIPE (SHALLOW COVER)	LF		\$164.00	\$0
	18" REINFORCED CONCRETE DRAINAGE PIPE (CLSM)	LF		\$204.00	\$0
	24" REINFORCED CONCRETE DRAINAGE PIPE	LF		\$220.00	\$0
	24" REINFORCED CONCRETE DRAINAGE PIPE (CLSM)	LF.		\$340.00	\$0
	DRAINAGE INLET (DI TYPE G) DRAINAGE INLET (TYPE 2 CATCH BASIN)	EA EA		\$5,400.00 \$9,200.00	\$0 \$0
	60" PRECAST CONCRETE PIPE MANHOLE	EA		\$9,200.00 \$19,238.00	\$0
	REMOVE DRAINAGE INLET	EA		\$1,030.00	\$0
	REMOVE STORM DRAIN PIPE	LF		\$45.00	\$0
71	RECONSTRUCT INLET AND INSTALL GATE VALVE	EA		\$10,200.00	\$0

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72 73	ADJUST INLET ROCK SLOPE PROTECTION (1/4T, CLASS 5, METHOD B)	EA LS		\$2,375.00 \$347,000.00	\$0 \$0
74	ROCK SLOPE PROTECTION FABRIC (CLASS 8)	LS		\$7,500.00	\$0
75	MINOR CONCRETE (RETAINING CURB)	LF		\$40.00	\$0
76	DETECTABLE WARNING SURFACE (PARTICIPATING)	SF		\$36.00	\$0
77	DETECTABLE WARNING SURFACE (NON-PARTICIPATING)	SF		\$36.00	\$0
78	MINOR CONCRETE (CURB AND GUTTER)	LF		\$40.00	\$0
79	MINOR CONCRETE (DRIVEWAY)	SQFT		\$14.00	\$0
80	MINOR CONCRETE (SIDEWALK) (PARTICIPATING)	SQFT		\$12.00	\$0
81	MINOR CONCRETE (SIDEWALK) (NON-PARTICIPATING)	SQFT		\$12.00	\$0
82	MINOR CONCRETE (VALLEY GUTTER)	SQFT		\$17.00	\$0
83	MINOR CONCRETE (CURB RAMP)	CY		\$900.00	\$0
84 85	REMOVE CONCRETE (CURB) REMOVE CONCRETE FLOODWALL	LF LF	35	\$9.00 \$82.00	\$0 \$2,870
86	REMOVE CONCRETE FLOODWALL REMOVE CONCRETE (SIDEWALK AND DRIVEWAY)	SQFT	35	\$2.00	\$2,670
87	REMOVE STAMPED CONCRETE	SQFT		\$6.00	\$0
88	REMOVE CONCRETE (CURB AND GUTTER)	LF		\$32.00	\$0
89	SET STANDARD STREET MONUMENT	EA		\$1,700.00	\$0
90	SET VERTICAL BENCH MONUMENT	EA		\$905.00	\$0
91	PAINT CURB	LF		\$2.75	\$0
92	REMOVE CURB PAINT	LF		\$8.00	\$0
93	ANTI-GRAFFITI COATING (BRIDGE)	SQFT		\$5.00	\$0
94	OBLITERATE SURFACING	SQYD		\$7.00	\$0
95	CHAIN AND POST FENCE	LF	125	\$92.00	\$11,500
96	POST AND CHAIN FENCE WITH PILASTER	LF	55	\$92.00	\$5,060
97	CHAIN LINK FENCE	LF	490	\$59.00	\$28,910
98	METAL GATE	EA	2	\$6,200.00	\$12,400
99	CHAIN LINK GATE REMOVE WOOD FENCE	EA	2	\$4,300.00 \$35.00	\$8,600
100	REMOVE CHAIN AND POST FENCE	LF LF	25 90	\$35.00	\$875 \$720
101	REMOVE CHAIN AND FOST FENCE REMOVE POST AND CHAIN FENCE WITH PILASTER	LF	90 55	\$10.00	\$550
102	REMOVE CHAIN LINK FENCE	LF LF	353	\$8.00	\$2,824
104	REMOVE CHAIN LINK GATE	EA	3	\$566.00	\$1,698
105	REMOVE METAL GATE	EA	2	\$566.00	\$1,132
106	RECONSTRUCT WOOD FENCE	LF	40	\$232.00	\$9,280
107	REMOVE PAVEMENT MARKER	EA		\$1.12	\$0
108	RESET METAL GATE	EA	1	\$3,000.00	\$3,000
109	PAVEMENT MARKER (RETROREFLECTIVE)	EA		\$11.00	\$0
110	REMOVE ROADSIDE SIGN	EA		\$68.00	\$0
111	RESET ROADSIDE SIGN	EA		\$108.00	\$0
112	RELOCATE ROADSIDE SIGN	EA		\$215.00	\$0
113	ROADSIDE SIGN	EA		\$340.00	\$0
114	EXTERIOR CONCRETE BARRIER (SW)	LF		\$885.00	\$0
115	INTERIOR CONCRETE BARRIER (W/O SW)	LF		\$784.00	\$0
116	PEDESTRIAN RAILING	LF		\$672.00	\$0
117	TUBULAR HANDRAILING (RETAINING WALL)	LF		\$187.00	\$0
118	TRANSITION RAILING (TYPE WB-31)	EA		\$6,300.00	\$0
119	ALTERNATIVE IN-LINE TERMINAL SYSTEM	EA		\$7,060.00	\$0
120	CRASH CUSHION	EA		\$36,500.00	\$0
121	CONCRETE BARRIER (TYPE 732SW MODIFIED)	LF	05	\$330.00	\$0
122	REMOVE CONCRETE BARRIER (TYPE K)	LF	95	\$32.00	\$3,040
123 124	REMOVE CONCRETE BARRIER (TYPE K) 6" THERMOPLASTIC TRAFFIC STRIPE	LF LF	60	\$11.00 \$2.25	\$660
124	8" THERMOPLASTIC TRAFFIC STRIPE	LF LF		\$2.25 \$4.50	\$0 \$0
126	THERMOPLASTIC TRAFFIC STRIFE THERMOPLASTIC PAVEMENT MARKING	SQFT		\$14.00	\$0
127	REMOVE TRAFFIC STRIPE	LF		\$1.12	\$0 \$0
128	REMOVE PAVEMENT MARKING	SQFT		\$4.50	\$0
129	FUTURE ELECTRICAL/COMMUNICATION CONDUIT AND PULL BOXES	LS		\$53,000.00	\$0
130	SAW CUT (CCWD)	LF		\$5.00	\$0
131	INSTALL 8" AND 6" WATER MAIN (CCWD)	LF		\$245.00	\$0
132	INSTALL 4" AND 2" WATER SERVICE (CCWD)	LS		\$118.00	\$0
133	BACKFLOW AND METER RELOCATION (CCWD)	LS		\$5,000.00	\$0
134	INSTALL GATE VALVES AND BOXES (CCWD)	EA		\$2,829.00	\$0
135	INSTALL HYDRANT (CCWD)	EA		\$20,370.00	\$0
136	DISINFECTION AND TESTING (CCWD)	LS		\$8,035.00	\$0
137	WATER MAIN CONNECTIONS (CCWD)	EA		\$6,000.00	\$0
138	SHEETING, SHORING, AND BRACING (CCWD)	LS		\$9,055.00	\$0
139	RAISE MANHOLES TO GRADE (CCWD)	EA		\$2,037.00	\$0
140	ADJUST WATER VALVE BOX (CCWD)	EA		\$1,020.00	\$0
141	RELOCATE HYDRANT (CCWD)	EA		\$14,700.00	\$0
142	ADJUST WATER VALVE BOX - SMALL ADJUSTMENT (CCWD)	EA		\$792.00	\$0
		1 10 1		\$62,000.00	\$0
143	RELOCATE POSE FACULTIES PRINCE	LS		·	
143 144	RELOCATE PG&E FACILITIES BRIDGE	LS	0.05	\$304,000.00	\$0
143			0.05	·	

Design Engineering @ 20% \$111,593

Construction Engineering @ 15% \$83,694

TOTAL COST: \$753,250