

Agenda Item Number

DATE January 24, 2022

## ORDERING CONSTRUCTION OF DES MOINES LEVEE ALTERATIONS - PHASE B AND FIXING A DATE FOR RECEIVING OF BIDS ON FEBRUARY 22, 2022 AND PUBLIC HEARING ON MARCH 21, 2022 ENGINEER'S ESTIMATE IS \$13,830,000.00

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF DES MOINES, IOWA: That the attached communication recommending construction of the following improvement and the method of financing; and also including the recommendation of the Des Moines City Engineer, as the Engineer, submitting plans, specifications, form of contract documents, and Engineer's estimate of cost for the construction of the following improvement:

Des Moines Levee Alterations - Phase B, 082020004

The improvement includes earthen levee raise and widening, earthwork, clearing, excavation, cast-in-place floodwall raises, cast-in-place retaining wall, gatewells, gatewell structural modifications, stoplog structure and stoplogs, revetment, manholes, storm sewer pipe and repair, articulated concrete block, utility abandonment and removal, pavement removal, Portland Cement Concrete (PCC) pavement, Hot Mix Asphalt (HMA) pavement, lighting removal and installation, fencing, erosion control, seeding, other incidental items and miscellaneous associated work including cleanup; all in accordance with the contract documents, including Plan File No. 639-113/259, with improvements located along the Raccoon River from the confluence of the Des Moines River to Martin Luther King Jr. Parkway, in Des Moines, Iowa

be and the same are hereby approved and accepted. The estimated construction cost for said improvement is \$13,830,000.00. The proposed plans, specifications, and form of contract documents are available for public inspection in the Des Moines City Engineer's Office.

BE IT FURTHER RESOLVED: That this Council hereby determines that it is necessary and advisable to construct said improvement in the manner set forth in the plans, specifications, and form of contract documents submitted by the Engineer; and that payment for the cost of said improvement shall be paid from the funding source identified below.

BE IT FURTHER RESOLVED: That a public hearing on said plans, specifications, form of contract documents, and Engineer's estimate of construction cost for said improvement be held in the City Council Chambers, 2nd Floor, City Hall, 400 Robert D. Ray Drive, Des Moines, Iowa, at 5:00 p.m. on March 21, 2022, at which time this Council will consider any objections offered thereto or to the making of said improvement.

BE IT FURTHER RESOLVED: That proposals will be received by the City of Des Moines, at the office of the Des Moines City Clerk until 11:00 a.m. on February 22, 2022, for the construction of said improvement, and the taking of bids in the manner required by law. Proposals received will be opened at a public meeting presided over by the Engineer in the City Council Chambers, 2nd Floor, City Hall, 400 Robert D. Ray Drive, Des Moines, Iowa, at 11:00 a.m. on February 22, 2022, after which the bids together with a bid tabulation and recommendation of the Engineer will be presented to the City Council at its next meeting for action thereon.



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BE IT FURTHER RESOLVED: That an appropriate Notice to Bidders for said improvement be posted, and Notice of Public Hearing for said improvement be published in the Des Moines Register, all as provided and directed by Chapter 26 and/or 314, Code of Iowa.

(City Council Communication Number <u>22-020</u> attached.)

Moved by

FORM APPROVED:

to adopt.

FUNDS AVAILABLE

s/Kathleen Vanderpool

Kathleen Vanderpool Deputy City Attorney s/Nickolas I Schaul

Nickolas J. Schaul Director of Finance

Funding Source: 2021-2022 CIP, Page 101, Flood Mitigation Improvements, SM087, Being: \$13,830,000 in Storm Water Utility Funds and Flood Mitigation Sales Tax



COUNCIL ACTION	YEAS	NAYS	PASS	ABSENT	I, P. Kay Cmelik, City Clerk of said City						
COWNIE					Council, hereby certify that at a meeting of the						
BOESEN					City Council, held on the above date, among other proceedings the above was adopted.						
GATTO											
MANDELBAUM					IN WITNESS WHEREOF, I have hereunto se						
SHEUMAKER					my hand and affixed my seal the day and year						
VOSS					first above written.						
WESTERGAARD											
TOTAL											
MOTION CARRIED				APPROVED							
				Mayo	City C						

Mayor

## CONSTRUCTION ESTIMATE

Date: 1/3/2022

## PROJECT: DES MOINES LEVEE ALTERATIONS - PHASE B

	ECT: DES MOINES LEVEE ALTERATIONS - PHASE B		ESTIMATED	AMOUNT	
NO.	DESCRIPTION	UNIT	TOTAL	UNIT PRICE	TOTAL
1 *	CLEARING AND GRUBBING	AC	3.40	\$11,500.00	\$39,100.00
2 *	TOPSOIL, ON-SITE	CY	14,670.00	\$18.00	\$264,060.00
3 *	EXCAVATION, CLASS 10	CY	39,750.00	\$21.00	\$834,750.00
4 *	REMOVAL OF STRUCTURE, CONCRETE BARRIER	EA	4.00	\$500.00	\$2,000.00
5 *	REMOVAL OF STRUCTURE, FLAPGATE, 4"	EA	1.00	\$500.00	\$500.00
6 *	REMOVAL OF STRUCTURE, FLAPGATE, 10"	EA	1.00	\$600.00	\$600.00
7 *	REMOVAL OF STRUCTURE, FLAPGATE, 12"	EA	3.00	\$600.00	\$1,800.00
8 *	REMOVAL OF STRUCTURE, FLAPGATE, 18"	EA	3.00	\$700.00	\$2,100.00
9 *	REMOVAL OF STRUCTURE, FLAPGATE, 24"	EA	2.00	\$800.00	\$1,600.00
10 *	REMOVAL OF STRUCTURE, FLAPGATE, 30"	EA	1.00	\$900.00	\$900.00
11 *	REMOVAL OF STRUCTURE, FLAPGATE, 42"	EA	1.00	\$1,000.00	\$1,000.00
12 *	REMOVAL OF STRUCTURE, APRON, 24"	EA	2.00	\$400.00	\$800.00
13 *	REMOVAL OF STRUCTURE, FLOODWALL, DM-III	LF	313.00	\$210.00	\$65,730.00
14 *	REMOVAL OF STRUCTURE, GUARDRAIL	LF	28.00	\$80.00	\$2,240.00
15 *	REMOVAL OF STRUCTURE, GATEWELL 131	EA	1.00	\$20,000.00	\$20,000.00
16 *	REMOVAL OF STRUCTURE, GATEWELL 186	EA	1.00	\$25,000.00	\$25,000.0
17 *	REMOVAL OF CONCRETE WALL AND DRAIN	EA	1.00	\$25,000.00	\$25,000.0
18 *	TREE PROTECTION FENCE, 48" HEIGHT	LF	7,150.00	\$4.00	\$28,600.0
19 *	SPECIAL PIPE EMBEDMENT	LF	2,074.00	\$17.00	\$35,258.0
20 *	REMOVAL OF SANITARY SEWER, RCP, 36"	LF	30.00	\$60.00	\$1,800.0
21	STORM SEWER TRENCHED, RCP, CLASS III, 15"	LF	386.00	\$115.00	\$44,390.0
22	STORM SEWER TRENCHED, RCP, CLASS III, 18"	LF	50.00	\$125.00	\$6,250.0
23	STORM SEWER TRENCHED, RCP, CLASS III, 24"	LF	1,491.00	\$125.00	\$186,375.0
24	STORM SEWER TRENCHED, RCP, CLASS III, 30"	LF	41.00	\$225.00	\$9,225.0
25	STORM SEWER TRENCHED, PVC, SDR 23.5, 4"	LF	29.00	\$60.00	\$1,740.0
26	STORM SEWER TRENCHED, DIP, CLASS 350, 12"	LF	27.00	\$250.00	\$6,750.0
27	STORM SEWER TRENCHED, DIP, CLASS 350, 36"	LF	50.00	\$500.00	\$25,000.0
28	* REMOVAL OF STORM SEWER, RCP, 12"	LF	188.00	\$30.00	\$5,640.0
29	* REMOVAL OF STORM SEWER, RCP, 18"	LF	65.00	\$35.00	\$2,275.0
30	* REMOVAL OF STORM SEWER, RCP, 24"	LF	16.00	\$70.00	\$1,120.0
31	* REMOVAL OF STORM SEWER, RCP, 72"	LF	21.00	\$200.00	\$4,200.0
32	* REMOVAL OF STORM SEWER, CMP, 10"	LF	65.00	\$30.00	\$1,950.0
33	* REMOVAL OF STORM SEWER, CMP, 30"	LF	65.00	\$40.00	\$2,600.0
34	* REMOVAL OF STORM SEWER FORCE MAIN	LS	1.00	\$6,000.00	\$6,000.0
35	FLAPGATE, 18"	EA	1.00	\$5,000.00	\$5,000.0
36	FLAPGATE, 24"	EA	2.00	\$6,000.00	\$12,000.
30	FLAPGATE, 30"	EA	1.00	\$7,500.00	\$7,500.
37	HEADWALL, 18"	EA	1.00	\$3,000.00	\$3,000.
38	HEADWALL, 18 HEADWALL, 24"	EA	2.00	\$3,000.00	\$6,000.0

			ESTIMATED	AMOUNT	
NO.	DESCRIPTION	UNIT	TOTAL	UNIT PRICE	TOTAL
40	HEADWALL, 30"	EA	1.00	\$3,500.00	\$3,500.00
41	PIPE APRON, RCP, CLASS III, 24"	EA	1.00	\$3,000.00	\$3,000.00
42 '	BYPASS PUMPING	LS	1.00	\$20,000.00	\$20,000.00
43 '	SPOT REPAIRS BY PIPE REPLACEMENT, RCP, CLASS III, 24"	EA	1.00	\$5,000.00	\$5,000.00
44 '	SPOT REPAIRS BY PIPE REPLACEMENT, RCP, CLASS III, 36"	EA	1.00	\$5,000.00	\$5,000.00
45	SPOT REPAIRS BY PIPE REPLACEMENT, RCP, CLASS III, 72"	EA	1.00	\$10,000.00	\$10,000.00
46	SPOT REPAIRS BY PIPE REPLACEMENT, RCP, CLASS III, 24"	LF	16.00	\$175.00	\$2,800.00
47	SPOT REPAIRS BY PIPE REPLACEMENT, RCP, CLASS III, 36"	LF	30.00	\$250.00	\$7,500.00
48	SPOT REPAIRS BY PIPE REPLACEMENT, RCP, CLASS III, 72"	LF	16.00	\$600.00	\$9,600.00
49	STORM SEWER ABANDONMENT, FILL AND PLUG, CIP, 4"	LF	100.00	\$150.00	\$15,000.00
50	* STORM SEWER ABANDONMENT, FILL AND PLUG, CIP, 10"	LF	52.00	\$200.00	\$10,400.00
51	* STORM SEWER ABANDONMENT, FILL AND PLUG, CMP, 12"	LF	65.00	\$200.00	\$13,000.0
52	* STORM SEWER ABANDONMENT, FILL AND PLUG, CMP, 18"	LF	170.00	\$250.00	\$42,500.0
53	* STORM SEWER ABANDONMENT, FILL AND PLUG, CMP, 24"	LF	163.00	\$250.00	\$40,750.0
54	* STORM SEWER ABANDONMENT, FILL AND PLUG, RCP, 12"	LF	70.00	\$200.00	\$14,000.0
55	* SANITARY SEWER ABANDONMENT, FILL AND PLUG, RCP, 15"	LF	173.00	\$225.00	\$38,925.0
56	* SANITARY SEWER ABANDONMENT, FILL AND PLUG, RCP, 42"	LF	188.00	\$400.00	\$75,200.0
57	STORM SEWER PIPE, CLASS 350 DI PIPE SPOOL, PE x PE, 8" DIA.	LF	38.00	\$260.00	\$9,880.0
58	STORM SEWER PIPE, CLASS 53 DI PIPE SPOOL, FL x PE, 4" DIA.	LF	3.00	\$300.00	\$900.0
59	STORM SEWER PIPE, CLASS 53 DI PIPE SPOOL, FL x PE, 8" DIA.	LF	7.00	\$260.00	\$1,820.0
60	VALVE, PLUG, FL, 4" DIA.	EA	1.00	\$1,500.00	\$1,500.0
61	VALVE, PLUG, FL, 8" DIA.	EA	3.00	\$3,000.00	\$9,000.0
62	VALVE, AIR/VACUUM, FL, 4" DIA.	EA	1.00	\$5,000.00	\$5,000.0
63	VALVE, AIR/VACUUM, FL, 8" DIA.	EA	3.00	\$15,000.00	\$45,000.0
64	FITTING, 22.5° BEND, MJ, 8" DIA.	EA	2.00	\$1,100.00	\$2,200.
65	FITTING, 22.5° BEND, MJ, 36" DIA.	EA	6.00	\$22,000.00	\$132,000.0
66	FITTING, 90° BEND, MJ, 8" DIA.	EA	4.00	\$1,250.00	\$5,000.0
67	FITTING, 90° BEND, MJ, 36" DIA.	EA	12.00	\$25,000.00	\$300,000.
68	FITTING, RESTRAINED JOINT ADAPTER, 4" DIA.	EA	2.00	\$125.00	\$250.
69	FITTING, RESTRAINED JOINT ADAPTER, 8" DIA.	EA	13.00	\$250.00	\$3,250.
	FITTING, RESTRAINED JOINT ADAPTER, 36" DIA.	EA	12.00	\$3,500.00	\$42,000.
70	FITTING, BOLT THROUGH MJ RESTRAINED ADAPTER, 8" DIA.	EA	2.00	\$600.00	\$1,200.
71	FITTING, BOLT THROUGH MJ RESTRAINED ADAPTER, 36" DIA.	EA	15.00	\$5,000.00	\$75,000.
72	FITTING, TEE, MJ, 8" × 4" × 8"	EA	1.00	· \$1,800.00	\$1,800.
	FITTING, TEE, MJ, 36" × 8" × 36"	EA	3.00	\$28,000.00	\$84,000.
74	MANHOLE, SW-401, 48" DIA.	EA	13.00	\$7,000.00	\$91,000.
75	MANHOLE, SW-401, 40 DIA.	EA	2.00	\$9,000.00	\$18,000
76	MANHOLE, SW-401, 60 DIA. MANHOLE, SW-404, 4.0' X 6.0'	EA	1.00	\$15,000.00	\$15,000
77	MANHOLE, SW-404, 4.0 X 9.0 MANHOLE, SW-404, 4.5' X 9.5'	EA	1.00	\$20,000.00	\$20,000
78	INTAKE, SW-512, 18" DIA.	EA	1.00	\$4,500.00	\$4,500
79		EA	1.00	\$2,000.00	\$2,000
80 81		EA	2.00	\$1,000.00	\$2,000

			ESTIMATED	UNITS	AMOUNT
NO.	DESCRIPTION	UNIT	TOTAL	UNIT PRICE	TOTAL
82 *	REMOVE INTAKE, 18" DIA.	EA	2.00	\$1,200.00	\$2,400.00
83	GATEWELL 131	EA	1.00	\$100,000.00	\$100,000.00
. 84	GATEWELL 133A	EA	1.00	\$85,000.00	\$85,000.00
85	GATEWELL 182	EA	1.00	\$65,000.00	\$65,000.00
86	GATEWELL 186	EA	1.00	\$110,000.00	\$110,000.00
87	GATEWELL 185C, GATEWELL STRUCTURE RAISE	EA	1.00	\$18,000.00	\$18,000.00
88	CAST-IN-PLACE FLOODWALL, STA. 512+00 TO STA. 516+68	CY	462.00	\$1,400.00	\$646,800.00
89	CAST-IN-PLACE FLOODWALL RAISE SEGMENT STA. 437+14 TO STA.	CY	7.00	\$6,000.00	\$42,000.00
90	440+14 CAST-IN-PLACE FLOODWALL RAISE SEGMENT STA. 440+14 TO STA.	CY	6.00	\$6,000.00	\$36,000.00
91 *	444+39 ABANDONMENT OF STRUCTURE, GATEWELL 181	EA	1.00	\$25,000.00	\$25,000.00
92 *	ABANDONMENT OF STRUCTURE, GATEWELL 165	EA	1.00	\$25,000.00	\$25,000.00
93 *	ABANDONMENT OF STRUCTURE, GATEWELL 275	EA	1.00	\$25,000.00	\$25,000.00
94 *	ABANDONMENT OF STRUCTURE, SANITARY SEWER MH	EA	1.00	\$7,500.00	\$7,500.00
95	STOPLOG STRUCTURE AND STOPLOGS	EA	1.00	\$95,000.00	\$95,000.00
96	CURB AND GUTTER, 2' WIDE, 6" THICK	LF	374.00	\$50.00	\$18,700.00
97	DROP CURB AND GUTTER, 2' WIDE, 6" THICK	LF	19.00	\$70.00	\$1,330.00
98 *	REMOVAL OF SIDEWALK	SY	84.00	\$15.00	\$1,260.00
99 *	REMOVAL OF SHARED USE PATH	SY	3,039.00	\$12.00	\$36,468.00
100 '	REMOVAL OF DRIVEWAY	SY	2,035.00	\$12.00	\$24,420.00
	REMOVAL OF CURB	LF	40.00	\$20.00	\$800.00
	SHARED USE PATH, HMA, 6" THICK	SY	2,687.00	\$55.00	\$147,785.00
102	SHARED USE PATH, PCC, 6" THICK	SY	456.00	\$70.00	\$31,920.00
103		SY	251.00	\$70.00	\$17,570.00
104		SF	32.00	\$50.00	\$1,600.00
105		SY	1,574.00	\$70.00	\$110,180.00
106		TONS	1,017.00	\$50.00	\$50,850.00
107		EA	12.00	\$2,000.00	\$24,000.00
108		EA	12.00	\$750.00	\$9,000.00
109		EA	11.00	\$4,000.00	\$44,000.00
110		EA	22.00	\$200.00	\$4,400.00
111		EA	22.00	\$200.00	\$4,400.00
112	* RESET STOCKPILED EXISTING SIGN	EA	24.00	\$125.00	\$3,000.00
113			1,008.00	\$12.00	\$12,096.00
114			8.00	\$20.00	\$160.00
115			1.00	\$1,000.00	\$1,000.0
116	* PAVEMENT SYMBOLS AND LEGENDS	EA		\$70,000.00	
117	* TEMPORARY TRAFFIC CONTROL * HYDRAULIC SEEDING, SEEDING, FERTILIZING, AND MULCHING - DES	LS	1.00 39.33	\$6,000.00	
118	* HYDRAULIC SEEDING, SEEDING, FERTILIZING, AND MOLOHING - 220 MOINES SEED MIX * HYDRAULIC SEEDING, SEEDING, FERTILIZING, AND MULCHING -	AC		\$15,000.00	
119	* HYDRAULIC SEEDING, SEEDING, FERTILIZING, AND MOLOHING *	AC	0.03		
120	* WARRANTY, SEEDING	LS	1.00	\$15,000.00	
121	* SOD	SQ	537.00	\$80.00	
122	* STORMWATER POLLUTION PREVENTION PLAN (SWPPP)	LS	1.00	\$35,000.00	
123	* TEMPORARY RECP, TYPE 3.B	SY	50,410.00	\$7.00	\$352,870.0

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			ESTIMATED	AMOUNT	
NO.	DESCRIPTION	UNIT	TOTAL	UNIT PRICE	TOTAL
124 *	WATTLE, STRAW, 12"	LF	12,035.00	\$3.00	\$36,105.00
125 *	WATTLE, REMOVAL	LF	12,035.00	\$1.00	\$12,035.0
126 *	RIP RAP, IDOT CLASS A	TON	8,425.00	\$55.00	\$463,375.0
127 *	RIP RAP, IDOT CLASS B	TON	19,682.00	\$65.00	\$1,279,330.0
128 *	RIP RAP, IDOT CLASS E	TON	47,080.00	\$72.00	\$3,389,760.0
129 *	SILT FENCE	LF	18,060.00	\$3.00	\$54,180.0
130 *	SILT FENCE, REMOVAL OF DEVICE	LF	18,060.00	\$1.00	\$18,060.0
131 *	EROSION CONTROL MULCHING, HYDROMULCHING	AC	20.00	\$4,000.00	\$80,000.0
132 *	INLET PROTECTION DEVICE, SURFACE APPLIED	EA	5.00	\$400.00	\$2,000.0
133 *	INLET PROTECTION DEVICE, WATTLES, STRAW	EA	13.00	\$200.00	\$2,600.0
134 *	INLET PROTECTION DEVICE, MAINTENANCE	EA	13.00	\$55.00	\$715.0
135 *	STABILIZED CONSTRUCTION ENTRANCE	TON	414.00	\$55.00	\$22,770.0
136 *	ZINC-COATED CHAINLINK, 72" HEIGHT	LF	1,858.00	\$50.00	\$92,900.0
137 *	PVC-COATED CHAINLINK, 96" HEIGHT	LF	220.00	\$65.00	\$14,300.0
138 *	GATE, CANTILEVER, ZINC-COATED STEEL, 30' WIDE, 72" HEIGHT	EA	1.00	\$5,000.00	\$5,000.0
139 *	GATE, SINGLE SWING, ZINC-COATED STEEL, 12' WIDE, 72" HEIGHT	EA	1.00	\$2,000.00	\$2,000.0
140 *	GATE, DOUBLE SWING, ZINC-COATED STEEL, 20' WIDE, 72" HEIGHT	EA	1.00	\$5,000.00	\$5,000.0
141 *	GATE, SINGLE SWING, PVC-COATED STEEL, 4' WIDE, 96" HEIGHT	EA	2.00	\$2,000.00	\$4,000.0
142 *	GATE, DOUBLE SWING, PVC-COATED STEEL, 20' WIDE, 96" HEIGHT	EA	2.00	\$5,000.00	\$10,000.0
143 *	BARBED WIRE, 3 STRAND, TYPE II ARMS	LF	1,199.00	\$8.00	\$9,592.0
144 *	REMOVAL OF FENCE	LF	2,172.00	\$6.50	\$14,118.0
145	COMBINED CONCRETE SIDEWALK AND RETAINING WALL	CY	200.00	\$1,400.00	\$280,000.0
146	HANDRAIL, SPECIAL, ALUMINUM	LF	221.00	\$100.00	\$22,100.0
147 *	ARTICULATED CONCRETE BLOCK MATTING	SF	54,370.00	\$17.00	\$924,290.0
148 *	WINDROW AND STOCKPILE RIP RAP	TON	4,531.00	\$45.00	\$203,895.0
149 *	PLUG OR ABANDON MONITORING WELL	EA	3.00	\$1,500.00	\$4,500.0
150 *	CONSTRUCTION SURVEY	LS	1.00	\$75,000.00	\$75,000.0
151 *	MONUMENT PRESERVATION OR REPLACEMENT	LS	1.00	\$8,000.00	\$8,000.
152 *	MOBILIZATION	LS	1.00	\$1,106,148.00	\$1,106,148.
153 *	CONCRETE WASHOUT	LS	1.00	\$20,000.00	\$20,000.
154 *	FLOOD CONTINGENCY PLAN	LS	1.00	\$150,000.00	\$150,000.
155 *	RAILROAD PROTECTIVE INSURANCE AND COORDINATION (IAIR)	LS	1.00	\$15,000.00	\$15,000.
156 *	RAILROAD PROTECTIVE INSURANCE AND COORDINATION (UPRR)	LS	1.00	\$15,000.00	\$15,000.

Prepared By: Craig Bouska

Checked By: \_\_\_\_

\* Item does not have to be included in 4-year maintenance bond, but shall be covered by a 1-year maintenance bond.

\$10,782,985.00

\$13,800,000.00