

HOWARD BEND LEVEE DISTRICT

***ANNUAL LANDOWNER MEETING
AUGUST 4, 2022***



Levee Assessments

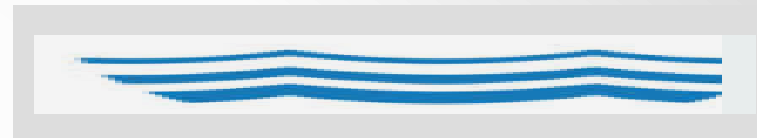
a) Maintenance

b) Installment – Debt Service

- Levee

- Sewer & Water

- Stormwater



HOWARD BEND LEVEE DISTRICT BOND DETAIL

	TYPE OF BOND	TOTAL BONDS ISSUED	CURRENT BALANCE	PRINCIPAL PAID
	LEVEE BONDS	33,340,000	16,250,000	17,090,000
	SEWER & WATER BONDS	5,915,000	1,125,000	4,790,000
**	STORMWATER BONDS	7,220,000	6,730,000	490,000
	TOTAL	46,475,000	24,105,000	22,370,000

* Total Debt Service Reserve Fund Balance is \$3,073,071.

** This amount includes the Series 2021 and 2022 Bond insuances of \$6,055,000 .



LEVEE INSTALLMENT ASSESSMENTS

Assessment Year	Installment Amount
2015	2,378,933.76
2016	2,376,040.01
2017	2,398,872.51 *
2018	2,393,456.26 *
2019	2,528,084.52
2020	2,531,195.73
2021	2,537,764.76
2022	2,705,666.84
2023	2,703,073.87
2024	2,709,771.47
2025	2,732,297.94
2026	2,782,296.93
2027	2,787,594.90
2028	2,885,354.63
2029-2039	507,088.20

*

Because of the bond refunding, these numbers are an approximation.



Ways to Reduce

- Development – Gateway Commerce Center
\$250,000 (when fully developed)
- Bond Refunding



Sewer & Water Installment Assessments

Assessment Year	Installment Amount
2021	305,092.44
2022	300,811.44
2023	301,366.81
2024	301,329.08
2025	301,036.59
2026	300,376.58



STORMWATER ASSESSMENTS

Assessment Year	2013 Bond Installment Amount	2021 Bond Installment Amount	2022 Bond Installment Amount
		3.31%	3.78%
2021	84,942.50		
2022	83,127.50		
2023	81,216.25	129,812.50	59,850.00
2024	84,130.00	129,812.50	59,850.00
2025	81,880.00	129,812.50	59,850.00
2026	84,440.00	179,125.00	59,850.00
2027	81,840.00	177,750.00	109,006.25
2028	84,070.00	373,625.00	141,728.13
2029	81,130.00	371,681.25	143,775.01
2030	83,085.00	374,531.25	140,737.51
2031	79,935.00	372,175.00	142,615.63
2032	81,680.00	374,262.50	144,325.00
2033-2041		372,820.00	142,231.25



STORMWATER PUMP STATION – AIRPORT SUBDISTRICT

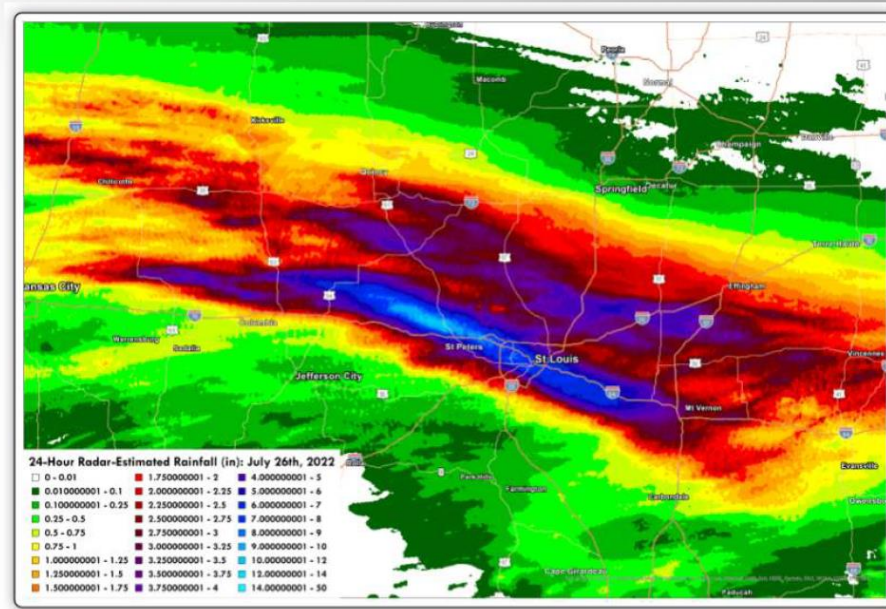
Design/Build Contract Update

1. Design is 99 % complete
2. Long-lead time equipment has been ordered
 - A. Pumps
 - B. Drives
 - C. Electrical components
3. Channel grading was to begin the week of the rain event
4. Easement acquisition
 - A. Secured: MSD
 - B. Pursuing: Ortmann, MHCC Lot 4 (north & east), MHCC between River Valley Parkway & flank levee



RAIN EVENT – MORNING OF JULY 26, 2022

New all-time record for daily precipitation = 8.60 inches in 12 hours
[prior record was 6.85 inches on August 20, 1915 (Galveston 1915 hurricane remnants)]



RAIN EVENT – MORNING OF JULY 26, 2022

CLIMATOLOGICAL CONTEXT

- Most prolific since record keeping began in 1874
- Roughly 25% of the average annual rainfall fell in 12 hours
- Highest 6-hour total exceeded the average amount of rain for the months of July and August
- Rainfall statistics put this event at or beyond a 1,000-year recurrence interval (or 0.1% chance of occurrence in any given year)

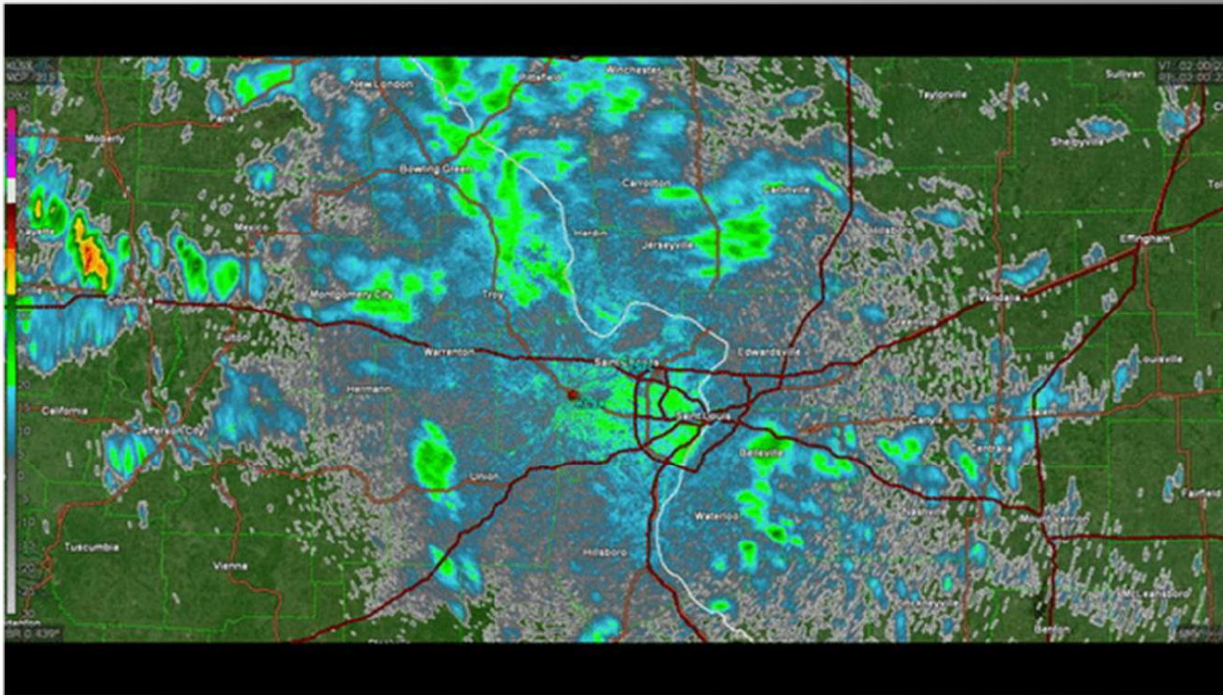
PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches) ¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
6-hr	2.00 (1.66-2.40)	2.31 (1.92-2.78)	2.86 (2.37-3.45)	3.36 (2.76-4.06)	4.11 (3.29-5.17)	4.73 (3.69-6.01)	5.40 (4.05-7.00)	6.13 (4.40-8.11)	7.15 (4.92-9.68)	7.98 (5.32-10.9)
12-hr	2.36 (1.98-2.80)	2.72 (2.28-3.23)	3.36 (2.82-4.01)	3.96 (3.30-4.74)	4.87 (3.95-6.08)	5.63 (4.44-7.10)	6.46 (4.90-8.31)	7.36 (5.34-9.69)	8.65 (6.01-11.6)	9.69 (6.52-13.1)
24-hr	2.76 (2.35-3.24)	3.17 (2.70-3.73)	3.92 (3.32-4.63)	4.61 (3.88-5.46)	5.66 (4.64-7.00)	6.55 (5.21-8.17)	7.50 (5.75-9.56)	8.54 (6.26-11.1)	10.0 (7.03-13.4)	11.2 (7.62-15.1)

10.36" in 6 hours
 12.21" in 12 hours
 8.22" in 5.5 hours
 10.30" in 12 hours
 KMOMARYL23
 AQUAPORT (FCC)
 WUNDERGROUND
 KMOSTLOU326
 BENBUSH (CCC)
 WUNDERGROUND



RAIN EVENT – MORNING OF JULY 26, 2022

RADAR LOOP

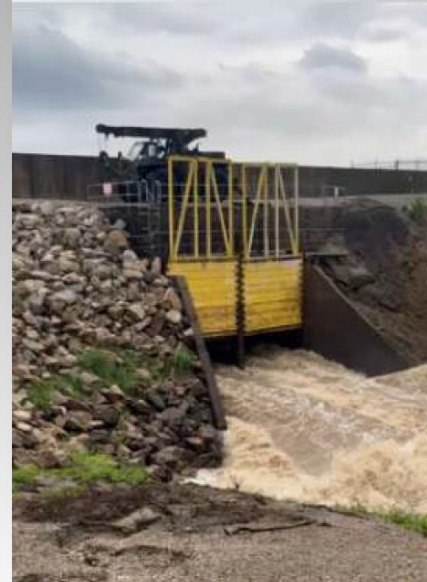


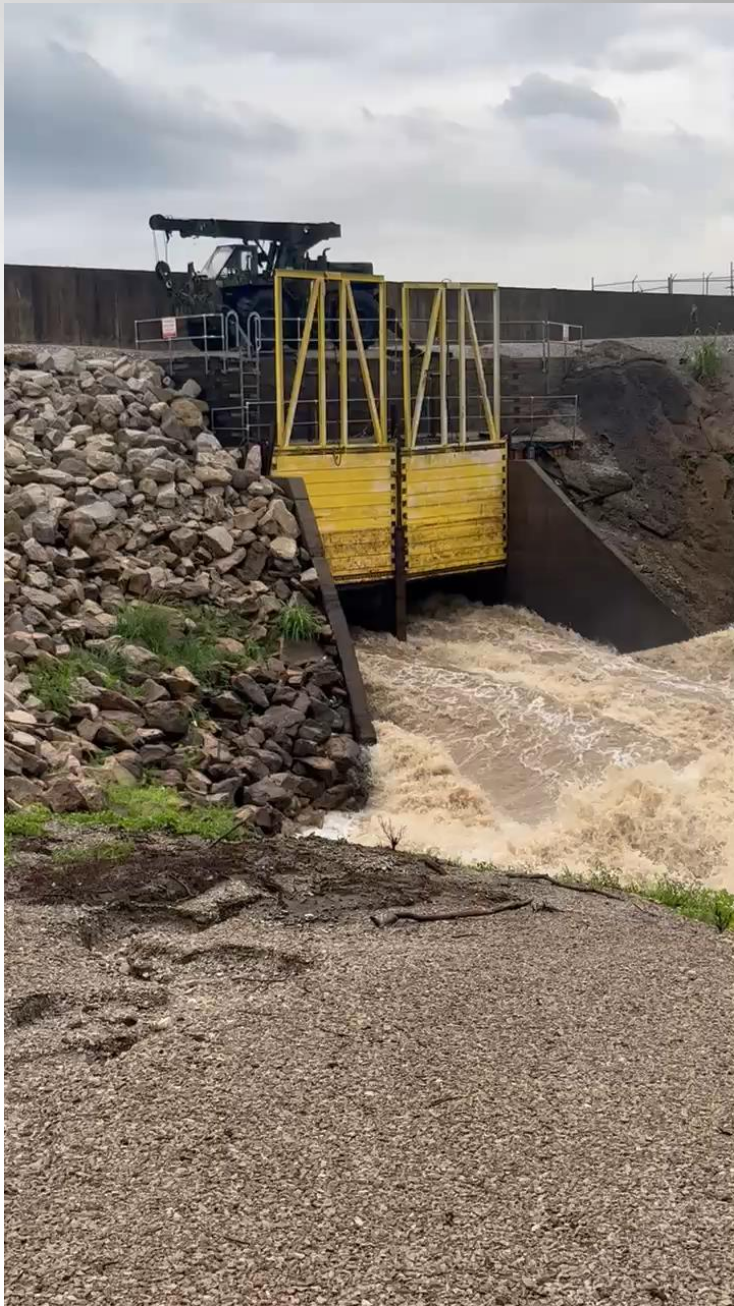
RAIN EVENT – MORNING OF JULY 26, 2022

DISCHARGE CREEK OUTFALL



9:00 AM





DISCHARGE CREEK OUTFALL WEST BANK SLOUGH DEVELOPMENT & PROGRESSION

JULY 26 - MORNING



JULY 26 - AFTERNOON



DISCHARGE CREEK OUTFALL WEST BANK SLOUGH DEVELOPMENT & PROGRESSION

JULY 26 - AFTERNOON



JULY 26 - EVENING



DISCHARGE CREEK OUTFALL WEST BANK SLOUGH DEVELOPMENT & PROGRESSION

JULY 26 - EVENING



JULY 27 - MORNING
0.5" RAIN BEFORE DAWN



DISCHARGE CREEK OUTFALL WEST BANK SLOUGH DEVELOPMENT & PROGRESSION



JULY 27 - AFTERNOON



DISCHARGE CREEK OUTFALL WEST BANK SLOUGH DEVELOPMENT



JULY 28 – MORNING
(1.6" RAIN IN AFTERNOON)

A SOLICITATION FOR EMERGENCY STABILIZATION WAS PREPARED ON THURSDAY, JULY 28 AND SENT TO 5 CONTRACTORS.

FIVE PROPOSALS WERE RECEIVED.

KUESEL WAS AWARDED THE PROJECT AND MOBILIZED ON FRIDAY.



JULY 29 – MORNING



IN CONCLUSION

❖ DEMAND FOR DEVELOPMENT

- very strong
- already taking place

❖ STORMWATER PUMPS

- spur development
- benefit Creve Coeur Park and MSD Treatment Plant
- foster airport growth and improvement

