

The seal of the City of Houston, Texas, is a circular emblem. It features a central five-pointed star above a steam locomotive. Below the locomotive is a plow. The words "CITY OF HOUSTON" are arched across the top, and "TEXAS" is arched across the bottom. The entire seal is rendered in a light gray, semi-transparent style.

STORM DRAINAGE SYSTEM

Storm Drainage System

The Storm Drainage System Program designs and constructs drainage improvement projects in areas of the City with a demonstrated need of flood protection for Houston and its residents. The Storm Water Drainage System includes collection of rainfall runoff via roadside ditches and/or streets with underground pipe (storm sewer) and the conveyance of storm water via off-road channels and underground structures to a receiving system and detention structures designed manage the rate of flow into a receiving system. The receiving system can be a bayou, tributary channel, or another storm sewer. The program includes investments in channel and detention capacity made in partnership with the Harris County Flood Control District.

The Capital Improvement Plan (CIP) provides an estimate of delivery by fiscal year for the next five years. The FY2023-2027 CIP includes \$899 million for Storm Drainage System improvements funded primarily through drainage fees assessed on non-exempted benefitted property and a dedication of ad valorem revenue to the Dedicated Drainage and Street Renewal Fund (DDSRF). An additional \$85 million of Water and Wastewater improvements are planned to accompany Storm Drainage System projects.

The Storm Drainage System Program consists of the following major components:

Capital Improvement Projects:

- The City uses objective criteria to develop a ranked list of the highest priority need areas across the City and prioritize candidate storm drainage projects based on their benefits and costs. Projects are developed in accordance with the City's design criteria to convey 2-year rainfall events within the collection system (roadside ditch and/or storm sewer) and reduce the risk of structural flooding during 100-year storm events. Properties within special flood hazard areas or the 100-year flood zone will be protected from localized event flooding, but may not be protected from flooding related to inadequate level of service of the receiving system.

Local Drainage Program (LDP) & Storm Water Action Team (SWAT) Projects:

- These programs address localized storm water drainage system problems including inadequate level of service due to underground storm sewer capacity, roadside ditch grade deterioration and encroachments, inlet capacity, and/or structural failure of the storm sewer or outfall. Engineering and construction are accomplished by work order contracts in order to address these problems quickly and cost effectively. The FY2023-2027 CIP commits approximately \$160 million to these programs.

Storm Drainage System Projects deferred to future CIPs:

The following projects were previously listed in Adopted CIPs and will be prioritized for construction as additional funding is identified in future CIPs.

M-410007-0001	Gulfway Terrace Sec 1 Area
M-410019-0001	Sharpstown Area 2
M-410021-0001	Pinewood Village 2
M-410022-0001	Garden Oaks and Shepherd Park (East)
M-410027-0002	Richmond Plaza 1 (North)
M-410036-0002	Spring Shadows Area
M-410038-0001	Central Park Area

Project Allocation	Fiscal Year Planned Appropriations					2023-2027
	2023	2024	2025	2026	2027	
Planning						
Acquisition-Land						
Design	13,632	13,711	8,000	10,000	8,000	53,344
Construction	134,223	260,775	162,120	66,417	33,055	656,590
Equipment Acquisition						
Salary Recovery						
Other	106,968	18,000	28,000	18,000	18,000	188,968
Total Allocation	254,823	292,487	198,120	94,417	59,055	898,902
Source of Funds						
4042 - DDSRF CAPITAL FUND-DRAINAGE CHARGE	127,468	151,836	100,815	61,055	59,055	500,230
4046 - DDSRF CAPITAL FUND-AD VALOREM TAX	17,806	13,425	28,902	13,374		73,507
4510 - Contribution for Capital Projects	9,404	55,377	27,748			92,529
5000 - Federal Government - Grant Funded	9,530	9,913		19,988		39,432
5430 - Federal State Local - HPW Pass thru DDSR	90,615	61,936	40,655			193,205
8500 - HPW-W&S Syst Consolidated Constr Fd						
Total Funds	254,823	292,487	198,120	94,417	59,055	898,902

Some projects in this section are related to the impact of Hurricane Harvey DR4332 and it is the City's intent to seek reimbursement from the Federal Emergency Management Agency (FEMA) and any other eligible sources for such expenditures, with the FEMA share being 75% of eligible costs.

STORM DRAINAGE SYSTEM - Summary of Funds
2023-2027 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CIP No.	Project	Fiscal Year Planned Appropriations					2023-2027
		2023	2024	2025	2026	2027	
M-000247	Nottingham & Yorkshire Area						
	4046 - DDSRF CAPITAL FUND-AD VALOREM TAX				13,374		13,374
	8500 - HPW-W&S Syst Consolidated Constr Fd				5,374		5,374
	Project Total				18,748		18,748
M-000288	Easthaven Blvd (Bryant to Ledge)						
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR	900					900
	Project Total	900					900
M-000294	Cullen Drainage and Paving						
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR			12,924			12,924
	8500 - HPW-W&S Syst Consolidated Constr Fd			1,855			1,855
	Project Total			14,779			14,779
M-000295	Scott Street Drainage and Paving						
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR			10,277			10,277
	8500 - HPW-W&S Syst Consolidated Constr Fd			1,267			1,267
	Project Total			11,543			11,543
M-410002	Potomac and Nantucket Area						
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR		13,201				13,201
	8500 - HPW-W&S Syst Consolidated Constr Fd		3,001				3,001
	Project Total		16,202				16,202
M-410005	Spring Shadows (North)						
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR		14,785				14,785
	Project Total		14,785				14,785

STORM DRAINAGE SYSTEM - Summary of Funds
2023-2027 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CIP No.	Project							2023-2027	
			2023	2024	2025	2026	2027		
M-410006	Arlington Heights Area								
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR		7,530		10,297			17,827	
	4046 - DDSRF CAPITAL FUND-AD VALOREM TAX		5,250					5,250	
	8500 - HPW-W&S Syst Consolidated Constr Fd		4,798		4,918			9,716	
	Project Total		17,578		15,215			32,793	
M-410008	Freeway Manor South Area								
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR			11,338				11,338	
	8500 - HPW-W&S Syst Consolidated Constr Fd			1,444				1,444	
	Project Total			12,782				12,782	
M-410010	Freeway Manor North Area								
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR			17,601				17,601	
	8500 - HPW-W&S Syst Consolidated Constr Fd			3,888				3,888	
	Project Total			21,489				21,489	
M-410013	Melrose Park Area								
	5000 - Federal Government - Grant Funded					19,988		19,988	
	Project Total					19,988		19,988	
M-410014	Wynnewood Acres Area								
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR		140					140	
	5430 - Federal State Local - HPW Pass thru DDSR		12,162					12,162	
	Project Total		12,302					12,302	
M-410015	Magnolia Park Area								
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR		7,121		8,199			15,320	
	8500 - HPW-W&S Syst Consolidated Constr Fd		3,409		5,187			8,596	
	Project Total		10,530		13,386			23,916	

STORM DRAINAGE SYSTEM - Summary of Funds
2023-2027 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CIP No.	Project							2023-2027	
			2023	2024	2025	2026	2027		
M-410016	Westridge and Braes Terrace Area								
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR			7,342				7,342	
	8500 - HPW-W&S Syst Consolidated Constr Fd			11,063				11,063	
	Project Total			18,405				18,405	
M-410019	Sharpstown Area 2								
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR		2,122					2,122	
	Project Total		2,122					2,122	
M-410023	Richmond Plaza (South) Area								
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR		9,600					9,600	
	8500 - HPW-W&S Syst Consolidated Constr Fd		6,000					6,000	
	Project Total		15,600					15,600	
M-410024	Southland Area								
	4046 - DDSRF CAPITAL FUND-AD VALOREM TAX				12,291			12,291	
	8500 - HPW-W&S Syst Consolidated Constr Fd				1,362			1,362	
	Project Total				13,653			13,653	
M-410025	Inwood Forest Area								
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR			8,894				8,894	
	8500 - HPW-W&S Syst Consolidated Constr Fd			6,509				6,509	
	Project Total			15,403				15,403	
M-410028	Westbury Area								
	4046 - DDSRF CAPITAL FUND-AD VALOREM TAX			13,425				13,425	
	8500 - HPW-W&S Syst Consolidated Constr Fd			9,165				9,165	
	Project Total			22,590				22,590	

STORM DRAINAGE SYSTEM - Summary of Funds
2023-2027 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CIP No.	Project							2023-2027	
			2023	2024	2025	2026	2027		
M-410029	Chateau Forest Area								
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR		6,479					6,479	
	8500 - HPW-W&S Syst Consolidated Constr Fd		8,235					8,235	
	Project Total		14,714					14,714	
M-410033	Avalon Place								
	4046 - DDSRF CAPITAL FUND-AD VALOREM TAX		2,804					2,804	
	Project Total		2,804					2,804	
M-410035	Northside High School Area								
	4046 - DDSRF CAPITAL FUND-AD VALOREM TAX				16,611			16,611	
	8500 - HPW-W&S Syst Consolidated Constr Fd				1,636			1,636	
	Project Total				18,247			18,247	
M-410038	Central Park Area								
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR			3,711				3,711	
	Project Total			3,711				3,711	
M-410039	Cottage Grove East Area								
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR		13,818					13,818	
	4046 - DDSRF CAPITAL FUND-AD VALOREM TAX		9,752					9,752	
	8500 - HPW-W&S Syst Consolidated Constr Fd		5,911					5,911	
	Project Total		29,480					29,480	
M-410040	Braeburn Glen Area Flood Mitigation								
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR		746		64			810	
	5430 - Federal State Local - HPW Pass thru DDSR				6,378			6,378	
	Project Total		746		6,442			7,188	

STORM DRAINAGE SYSTEM - Summary of Funds
2023-2027 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CIP No.	Project							2023-2027	
			2023	2024	2025	2026	2027		
M-420126	Local Drainage Program (LDP)								
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR		12,000	12,000	12,000	12,000	12,000	60,000	
	Project Total		12,000	12,000	12,000	12,000	12,000	60,000	
M-420HUD	CDBG Disaster Recovery Program								
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR		1,143					1,143	
	5000 - Federal Government - Grant Funded		9,530					9,530	
	Project Total		10,673					10,673	
M-42LHUD	CDBG Mitigation: Local Action Plan								
	5000 - Federal Government - Grant Funded			9,913				9,913	
	Project Total			9,913				9,913	
M-430006	Storm Water Action Team (SWAT)								
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR		20,000	20,000	20,000	20,000	20,000	100,000	
	Project Total		20,000	20,000	20,000	20,000	20,000	100,000	
M-430100	Pre-Engineering for Storm Water Drainage								
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR			2,000		2,000		4,000	
	Project Total			2,000		2,000		4,000	
M-430220	Project Mgmt. Incl. Testing & Inspection								
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR		1,700	1,700	1,700	1,700	1,700	8,500	
	Project Total		1,700	1,700	1,700	1,700	1,700	8,500	
M-430241	Stormwater Pump Station & Flood Warning								
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR		3,597	1,000	1,000	1,000	1,000	7,597	
	4510 - Contribution for Capital Projects		1,771					1,771	
	5430 - Federal State Local - HPW Pass thru DDSR		10,370	1,000				11,370	
	Project Total		15,738	2,000	1,000	1,000	1,000	20,738	

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2023-2027 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CIP No.	Project							2023-2027	
			2023	2024	2025	2026	2027		
M-430296	Regional Stormwater Detention								
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR		17,367	17,420	17,355	17,355	17,355	86,852	
	4510 - Contribution for Capital Projects		2,126		27,748			29,874	
	5430 - Federal State Local - HPW Pass thru DDSR		2,948	6,443	24,276			33,668	
	Project Total		22,442	23,864	69,380	17,355	17,355	150,395	
M-430800	Developer Participation								
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR		3,000	3,000	3,000	3,000	3,000	15,000	
	Project Total		3,000	3,000	3,000	3,000	3,000	15,000	
M-43E101	HMGP North Canal Project								
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR			13,844				13,844	
	4510 - Contribution for Capital Projects			55,377				55,377	
	5430 - Federal State Local - HPW Pass thru DDSR			54,492				54,492	
	Project Total			123,713				123,713	
M-43HCFC	Harris County Flood Control Dist Agrmt								
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR		5,506					5,506	
	4510 - Contribution for Capital Projects		5,506					5,506	
	5430 - Federal State Local - HPW Pass thru DDSR		33,038		10,000			43,038	
	Project Total		44,051		10,000			54,051	
M-450500	Storm Water Improvements Under R/S								
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR		10,699					10,699	
	5430 - Federal State Local - HPW Pass thru DDSR		32,097					32,097	
	Project Total		42,796					42,796	
M-500001	Future Design								
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR		4,000	4,000	4,000	4,000	4,000	20,000	
	Project Total		4,000	4,000	4,000	4,000	4,000	20,000	

STORM DRAINAGE SYSTEM - Summary of Funds
2023-2027 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CIP No.	Project							2023-2027	
			2023	2024	2025	2026	2027		
M-NA0000	Funding Offset								
	8500 - HPW-W&S Syst Consolidated Constr Fd		-28,352	-35,071	-16,225	-5,374		-85,022	
	Project Total		-28,352	-35,071	-16,225	-5,374		-85,022	
	Total Appropriations:		254,823	292,487	198,120	94,417	59,055	898,902	