

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 inscribed in an arc at the top, and "TEXAS" is inscribed in an arc at 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 FY2024-2028 CIP includes \$921 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 \$75 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 FY2024-2028 CIP commits approximately \$208 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					2024-2028
	2024	2025	2026	2027	2028	
Planning						
Acquisition-Land						
Design	16,783	8,950	10,950	8,950	10,950	56,583
Construction	225,919	150,471	278,886	33,055	31,300	719,631
Equipment Acquisition						
Salary Recovery						
Other	20,122	70,796	18,000	18,000	18,000	144,917
Total Allocation	262,824	230,217	307,836	60,005	60,250	921,131
Source of Funds						
4042 - DDSRF CAPITAL FUND-DRAINAGE CHARGE	149,498	148,332	86,147	60,005	60,250	504,232
4046 - DDSRF CAPITAL FUND-AD VALOREM TAX	33,839	16,611	25,665			76,115
4510 - Contribution for Capital Projects	21,349		83,125			104,474
4515 - Contributed Capital Project Fund	20,000					20,000
5000 - Federal Government - Grant Funded	15,606	9,913	34,131			59,650
5430 - Federal State Local - HPW Pass thru DDSR	22,532	55,361	78,769			156,661
8500 - HPW-W&S Syst Consolidated Constr Fd						
Total Funds	262,824	230,217	307,836	60,005	60,250	921,131

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
2024-2028 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CIP No.	Project	Fiscal Year Planned Appropriations					2024-2028
		2024	2025	2026	2027	2028	
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-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
M-410006	Arlington Heights Area						
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR	8,826		10,297			19,123
	4046 - DDSRF CAPITAL FUND-AD VALOREM TAX	7,858					7,858
	8500 - HPW-W&S Syst Consolidated Constr Fd	8,263		4,918			13,181
	Project Total	24,947		15,215			40,162

STORM DRAINAGE SYSTEM - Summary of Funds
2024-2028 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CIP No.	Project						2024-2028	
		2024	2025	2026	2027	2028		
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
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

STORM DRAINAGE SYSTEM - Summary of Funds
2024-2028 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CIP No.	Project						2024-2028
		2024	2025	2026	2027	2028	
M-410019	Sharpstown Area 2						
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR	2,122					2,122
	Project Total	2,122					2,122
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
M-410029	Chateau Forest Area						
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR	10,699					10,699
	8500 - HPW-W&S Syst Consolidated Constr Fd	1,455					1,455
	Project Total	12,154					12,154
M-410033	Avalon Place						
	4046 - DDSRF CAPITAL FUND-AD VALOREM TAX	2,804					2,804
	Project Total	2,804					2,804

STORM DRAINAGE SYSTEM - Summary of Funds
2024-2028 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CIP No.	Project						2024-2028	
		2024	2025	2026	2027	2028		
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	12,981						12,981
	4046 - DDSRF CAPITAL FUND-AD VALOREM TAX	9,752						9,752
	8500 - HPW-W&S Syst Consolidated Constr Fd	5,701						5,701
	Project Total	28,434						28,434
M-410040	Braeburn Glen Area Flood Mitigation							
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR		56					56
	5430 - Federal State Local - HPW Pass thru DDSR		5,597					5,597
	Project Total		5,653					5,653
M-410291	Turkey Gully Diversion							
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR	2,122						2,122
	5000 - Federal Government - Grant Funded			14,143				14,143
	Project Total	2,122		14,143				16,265
M-420126	Local Drainage Program (LDP)							
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR	16,960	12,950	12,950	12,950	12,950		68,760
	Project Total	16,960	12,950	12,950	12,950	12,950		68,760

STORM DRAINAGE SYSTEM - Summary of Funds
2024-2028 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CIP No.	Project						2024-2028	
		2024	2025	2026	2027	2028		
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	
	4510 - Contribution for Capital Projects	19,578					19,578	
	4515 - Contributed Capital Project Fund	20,000					20,000	
	Project Total	59,578	20,000	20,000	20,000	20,000	139,578	
M-430100	Pre-Engineering for Storm Water Drainage							
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR	2,000		2,000		2,000	6,000	
	Project Total	2,000		2,000		2,000	6,000	
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	4,597	1,000	1,000	1,000	1,000	8,597	
	4510 - Contribution for Capital Projects	1,771					1,771	
	5430 - Federal State Local - HPW Pass thru DDSR	10,370					10,370	
	Project Total	16,738	1,000	1,000	1,000	1,000	20,738	

**STORM DRAINAGE SYSTEM - Summary of Funds
2024-2028 CAPITAL IMPROVEMENT PLAN (\$ Thousands)**

CIP No.	Project						2024-2028	
		2024	2025	2026	2027	2028		
M-430296	Regional Stormwater Detention							
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR	17,355	21,388	17,355	17,355	15,600	89,053	
	4510 - Contribution for Capital Projects			27,748			27,748	
	5000 - Federal Government - Grant Funded	6,076					6,076	
	5430 - Federal State Local - HPW Pass thru DDSR		7,667	24,276			31,943	
	Project Total	23,431	29,055	69,380	17,355	15,600	154,820	
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							
	5430 - Federal State Local - HPW Pass thru DDSR		10,000				10,000	
	Project Total		10,000				10,000	
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
2024-2028 CAPITAL IMPROVEMENT PLAN (\$ Thousands)**

CIP No.	Project						2024-2028	
		2024	2025	2026	2027	2028		
M-NA0000	Funding Offset							
	8500 - HPW-W&S Syst Consolidated Constr Fd	-45,565	-18,278	-11,654			-75,497	
	Project Total	-45,565	-18,278	-11,654			-75,497	
	Total Appropriations:	262,824	230,217	307,836	60,005	60,250	921,131	