

PROPOSED CAPITAL IMPROVEMENT PLAN FY2023 - FY2027

PROGRAM: DRAINAGE

Program Priority:

PROJECT NAME: Dove Meadows & Borden's Gully Detention Pond

CIP NUMBER: DR1903

CONTACT PERSON: Christopher Sims

PROJECT COST BY FISCAL YEAR

Project Cost	Previously Appropriated	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Future Years	Total
Planning/Design	1,085,853							\$1,085,853
Land	1,076,859							\$1,076,859
Construction	3,460,955							\$3,460,955
Equip/Furnishings								\$0
Total Cost	\$5,623,667	\$0	\$0	\$0	\$0	\$0	\$0	\$5,623,667

FUNDING SOURCE BY FISCAL YEAR

Funding Source	Previously Appropriated	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Future Years	Total
Prior Bonds								\$0
GO Bonds	5,584,431							\$5,584,431
Future Bonds								\$0
Potential Grant(s)								\$0
Park Dedication Fees								\$0
4B Funding								\$0
CRF Funds								\$0
Other	39,236							\$39,236
Total Funding	\$5,623,667	\$0	\$0	\$0	\$0	\$0	\$0	\$5,623,667

PROJECT DESCRIPTION

Design, purchase land, and construct a 115 ac-ft detention pond adjacent to Borden's Gully and Dove Meadows Subdivision. Project includes design, purchase of land, and construction of extreme event overflow swales within Dove Meadows, specifically along Blue Wing Dr. A drainage study and HEC-RAS modeling should be performed with this project to ensure the proposed pond is the best use of detention for the Dove Meadows Subdivision. It is anticipated that the proposed detention pond will be designed as an on-line pond to Borden's Gully using the following parameters:

* The inflow weir invert to be set at the 10-yr existing WSE (10.2'). the downstream and upstream inverts of the outflow pipe (24"RCP) to be set at 5.25' (approximately 1' above the bottom of Borden's Gully) and 5.75' respectively. The inflow weir will consist of a concrete-lined trapezoidal section with a bottom width of 10'.

* The pond is to be approximately 17 acres in size (460' wide by 1,600' long) and located just east of Blue Wing Dr and west of Borden's Gully. This pond will create approximately 115 ac-ft of new detention storage for this area.

Consideration should be given to incorporate the Dove Meadows "park" land into the new pond area to maximize benefits during extreme events.

The City Received Nationwide Permit Verification from the Army Corp of Engineers April 2021. Wetlands mitigation credits have been purchased and transferred as of June 2022. Anticipate Construction award Fall of 2022.

PROJECT JUSTIFICATION

The Bay Colony area, including Dove Meadows Subdivision, is impacted by existing drainage culverts at Hughes Lane and W. Deats Road. This area is also impacted by the condition of Dickinson Bayou downstream of these culverts. The crossings are designed based on outdated rainfall data (100-yr WSE assumed at less than 13.5') and the Bayou through the City of Dickinson is not maintained. With current rainfall data being released, this area of League City will be further impacted during the 10-yr, 100-yr, and 500-yr rainfall events. The Dove Meadows Subdivision is the first in this area to see the impacts of the back-up due to the undersized crossings and the unmaintained Dickinson Bayou. The added detention will help reduce the potential for structural flooding in Dove Meadows.

ADDITIONAL CONSIDERATIONS

	YES	NO	Recurring M&O Costs	Amount
Is the project necessary under State/Federal Mandate, contractual obligation, or City Code?		NO	Personnel/Benefits (50xx)	\$0
			Supplies (51xx)	\$0
Will this project create future Capital Projects?		NO	Repairs/Maintenance (52xx)	\$0
Is your request in the current C I P ?	YES		Services (53xx)	\$0
If yes, has the cost of the project changed?	YES		TOTAL	\$0