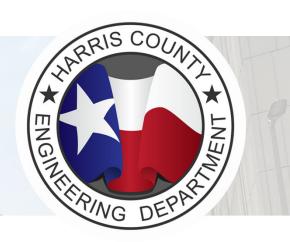
Harris County Engineering Department Recovery & Resiliency Division

Timberlake Estates Subdivision Drainage Improvements Project

Date: April 18, 2023

PRESENTER: ISABEL S. FUNG, P.E., PMP PROGRAM MANAGER





AGENDA

- Introduction
- Project Overview
 - ☐ Project Goals
 - ☐Project Benefits
 - ☐ Project limits
- Proposed Improvements
 - ☐ Proposed Storm Sewer System and Roadway Improvements
 - ☐ Proposed Stormwater Detention Basin
- Project Life Cycle
- Project Status
 - ☐ Project Schedule
 - **□**Agreements
- Total Project Budget





PROJECT GOALS

To Reduce the risk of Structural Flooding near
 100 - year Storm Event (1% AEP)



- Improve the Storm System Conveyance Capacity
- Asphalt Roadway Replacement and Roadside Ditches Improvements
- Mitigate Subdivision Drainage Improvements within the Existing Amenity Lake

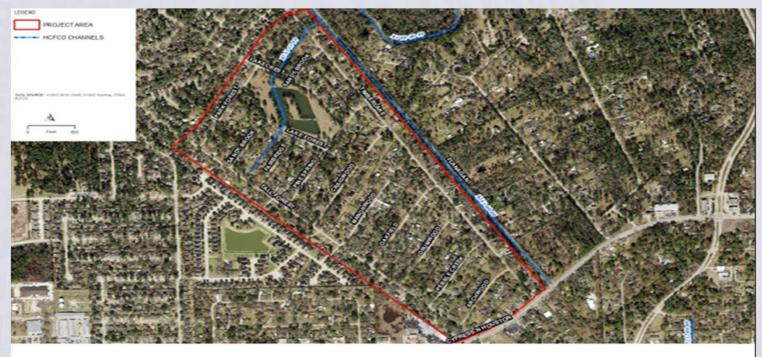


PROJECT BENEFITS

- Reducing the risk of structure flooding for approx. 78 homes at the 2-year, 10-year, and 100-year storm events
- Replacing of 56,000 SY of Asphalt Roadway
- Improvement of approx. 37,000 LF Roadside Ditches
- Improvement of Approx. 8,000 SY of Driveways
- Adding of 32 Acre-Feet of Volume For the Proposed Storm Water Detention Basin



PROJECT LIMITS



TIMBERLAKE ESTATES SUBDIVISION DRAINAGE IMPROVEMENTS

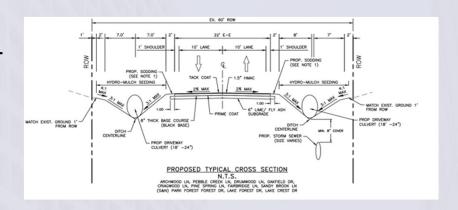
Project Location

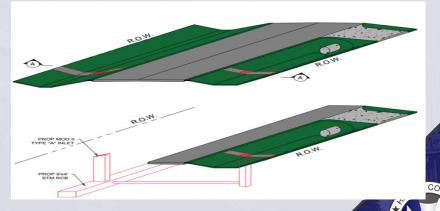


OFFICE OF THE
COUNTY ENGINEER

PROPOSED IMPROVEMENTS WITHIN THE SUBDIVISION

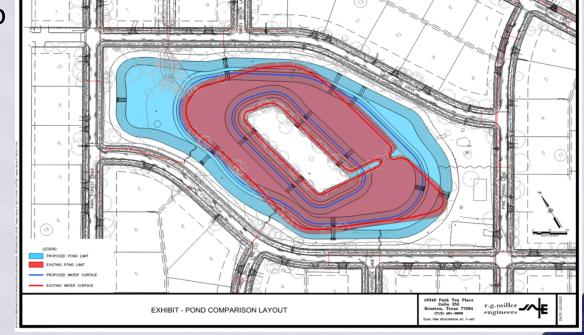
- Storm sewer systems ranging from 24inch to 36-inch RCP
- Regrading the existing roadside ditches
- Proposed underground storm sewer system
- Asphalt pavement replacement

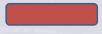




PROPOSED AMENITY LAKE IMPROVEMENT

- Conversion of amenity lake to proposed detention basin to mitigate the proposed storm system improvements
- Proposed Stormwater
 Detention Basin Capacity 32
 acre-feet





Existing Pond Limits



Proposed Pond Limits



PROPOSED STORMWATER DETENTION BASIN

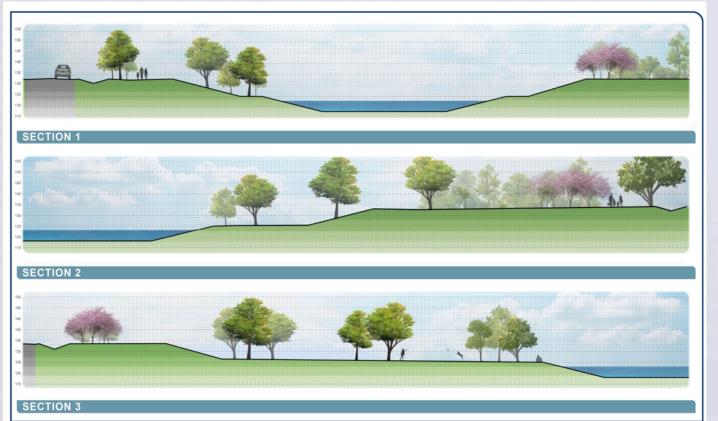








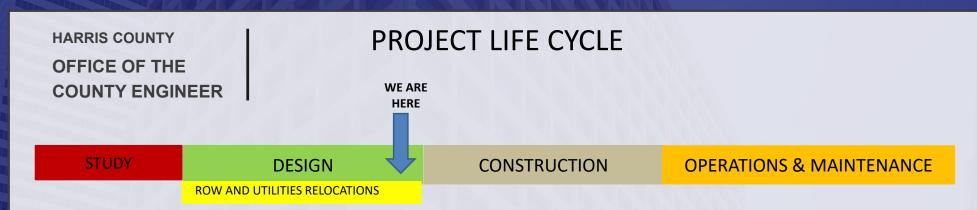
PROPOSED STORMWATER DETENTION BASIN PROFILE











PROJECT STATUS

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Utility Interlocal Agreement (ILA) #1

• Utility Conflicts / Relocations

Drainage Easement Interlocal Agreement (ILA) #2

- Maintenance Responsibilities
- ROW Acquisition (Lake Expansion)
- Amenities

PROJECT SCHEDULE				
Design , ILA and ROW	3 rd Quarter 2023			
Bid/Advertise Project	3 rd Quarter 2023			
Construction Start	4 th Quarter 2023			
Construction Finish	4 th Quarter 2024			



TOTAL PROJECT BUDGET \$15,808,712.00

Design Costs

Construction Costs

Utility Relocation Costs

Easement Costs



Questions???



