



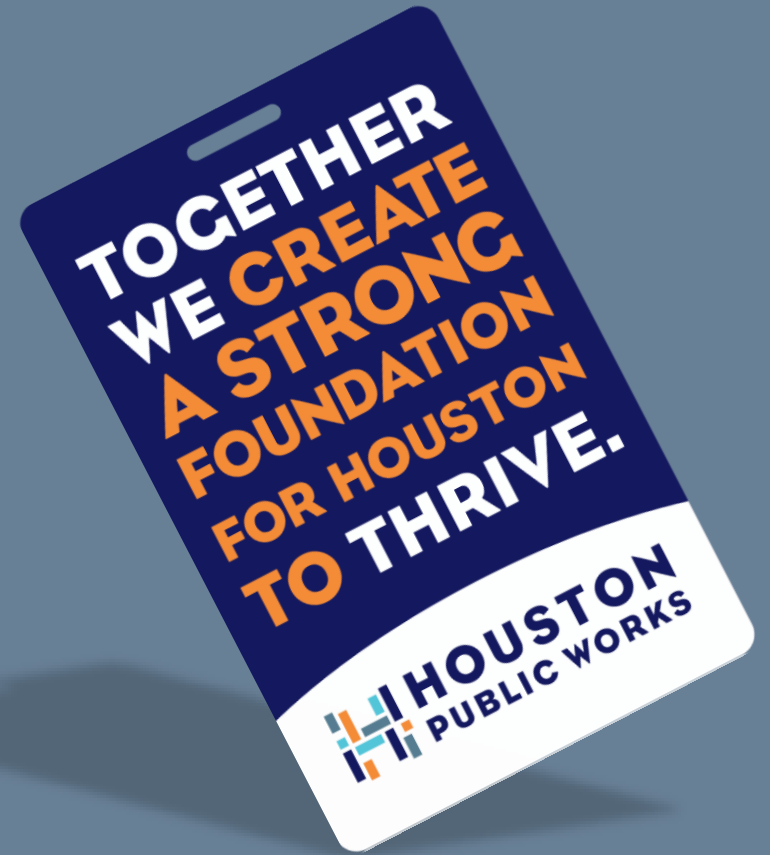
CHAPTER 26 HALLS BAYOU GREENWAY PARK

SINGARPAL SINGH SEKHON, P.E., CCM, PMP, ENV SP
MANAGING ENGINEER
CAPITAL PROJECTS
OCTOBER 5TH, 2023



PURPOSE

together we create a strong foundation
for Houston to thrive



5 TO THRIVE VALUES

respect | ownership | communication | integrity | teamwork

AGENDA



Introduction



Project
Information



Location
Decision Factors



Impacts



Observations

PROGRAM OBJECTIVE

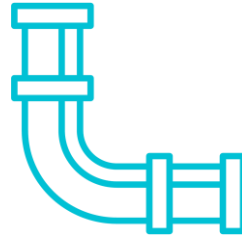
- The City of Houston operates and maintain **39 Wastewater Plants** and **384 Lift Stations**.
- The City plans to divert flows to regional lift stations and Wastewater Treatment plants and abandon facilities to meet **three** main objectives:



- regulatory requirements
- improve reliability
- reduce operation and maintenance costs.

PROJECT DESCRIPTION

Connect new wastewater line that collects flows for the areas served by Tidwell Timbers Wastewater Treatment Plant (WWTP) to FWSD#23 WWTP*



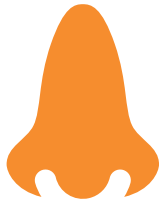
Replace with new, deep 60-inch gravity wastewater crossing beneath Halls Bayou

Why do this?

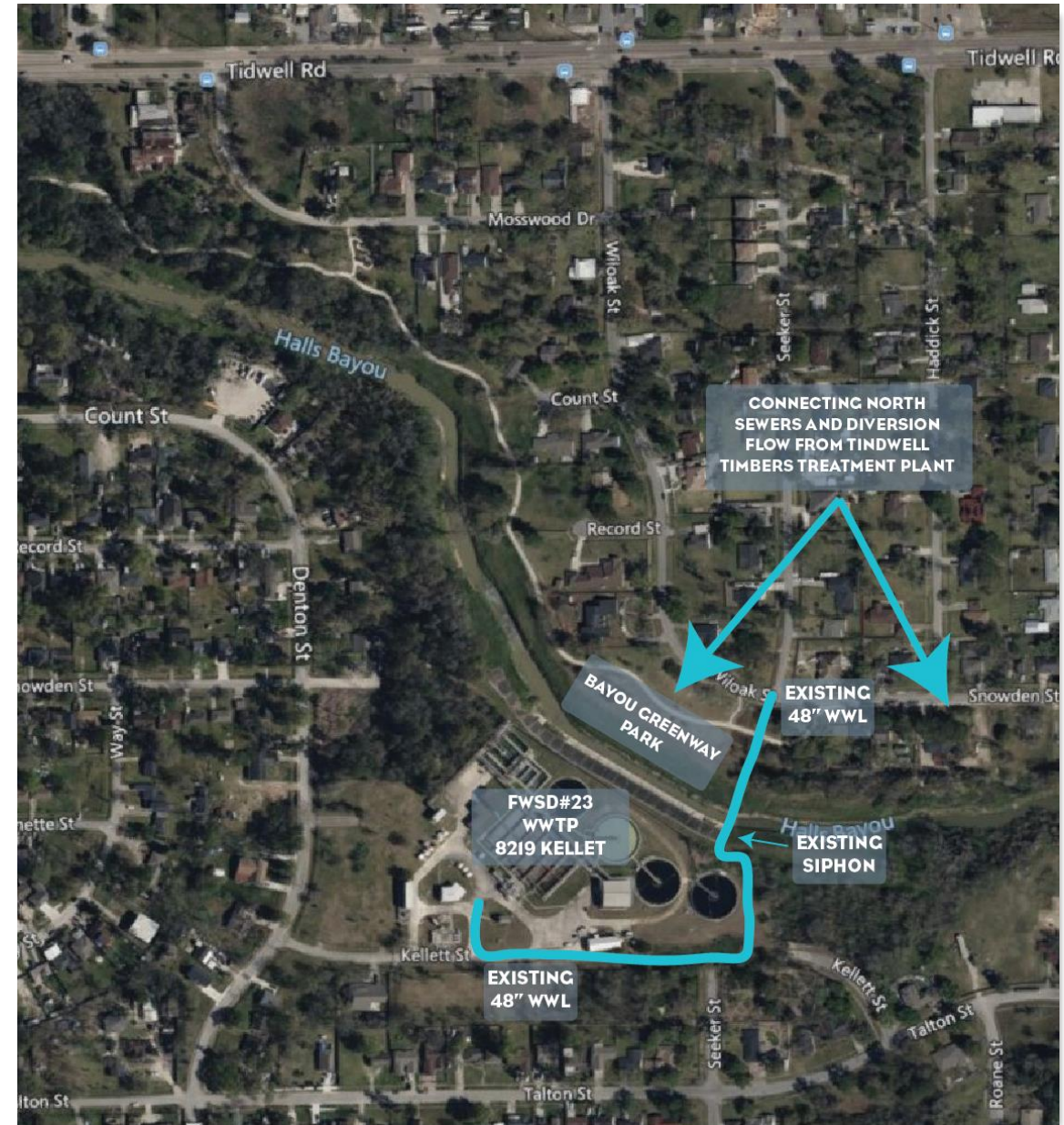
Current wastewater line and siphon will end operating due to:



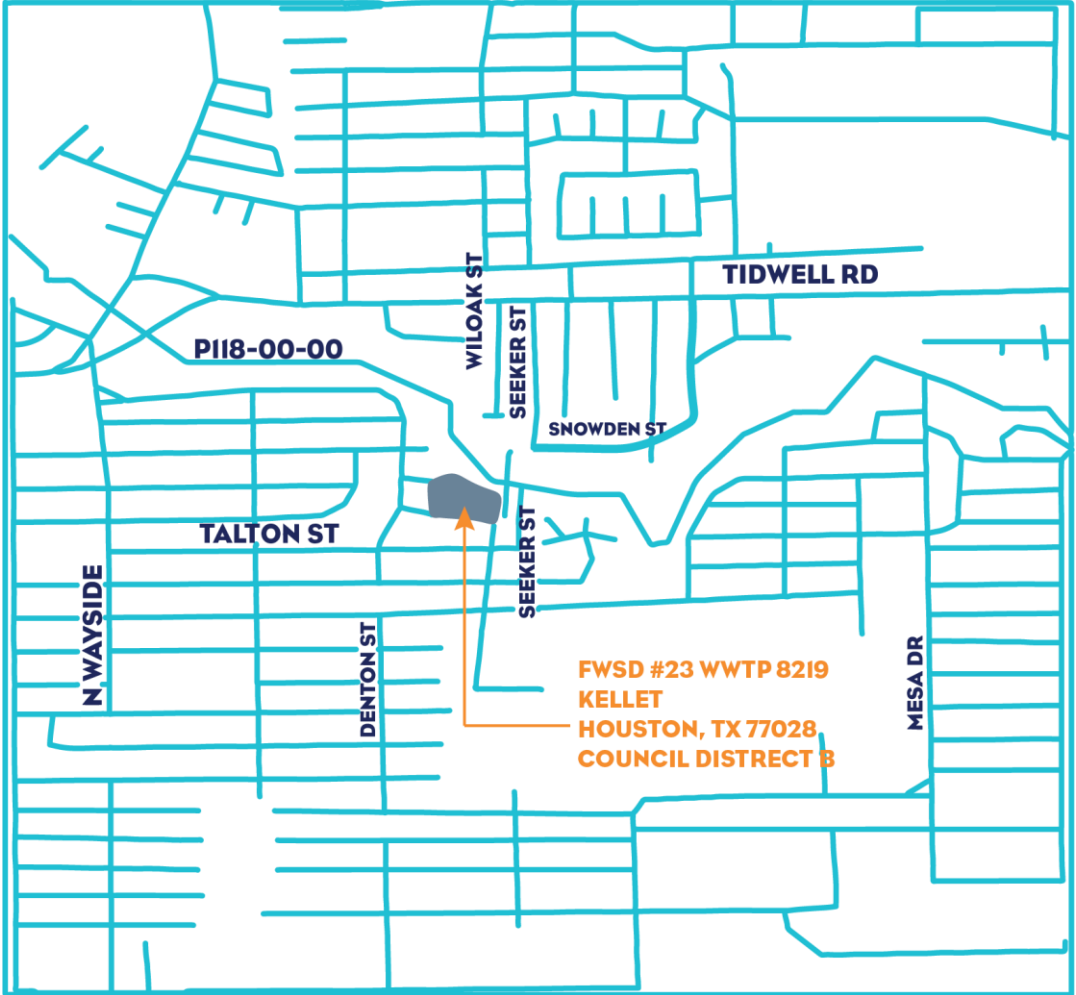
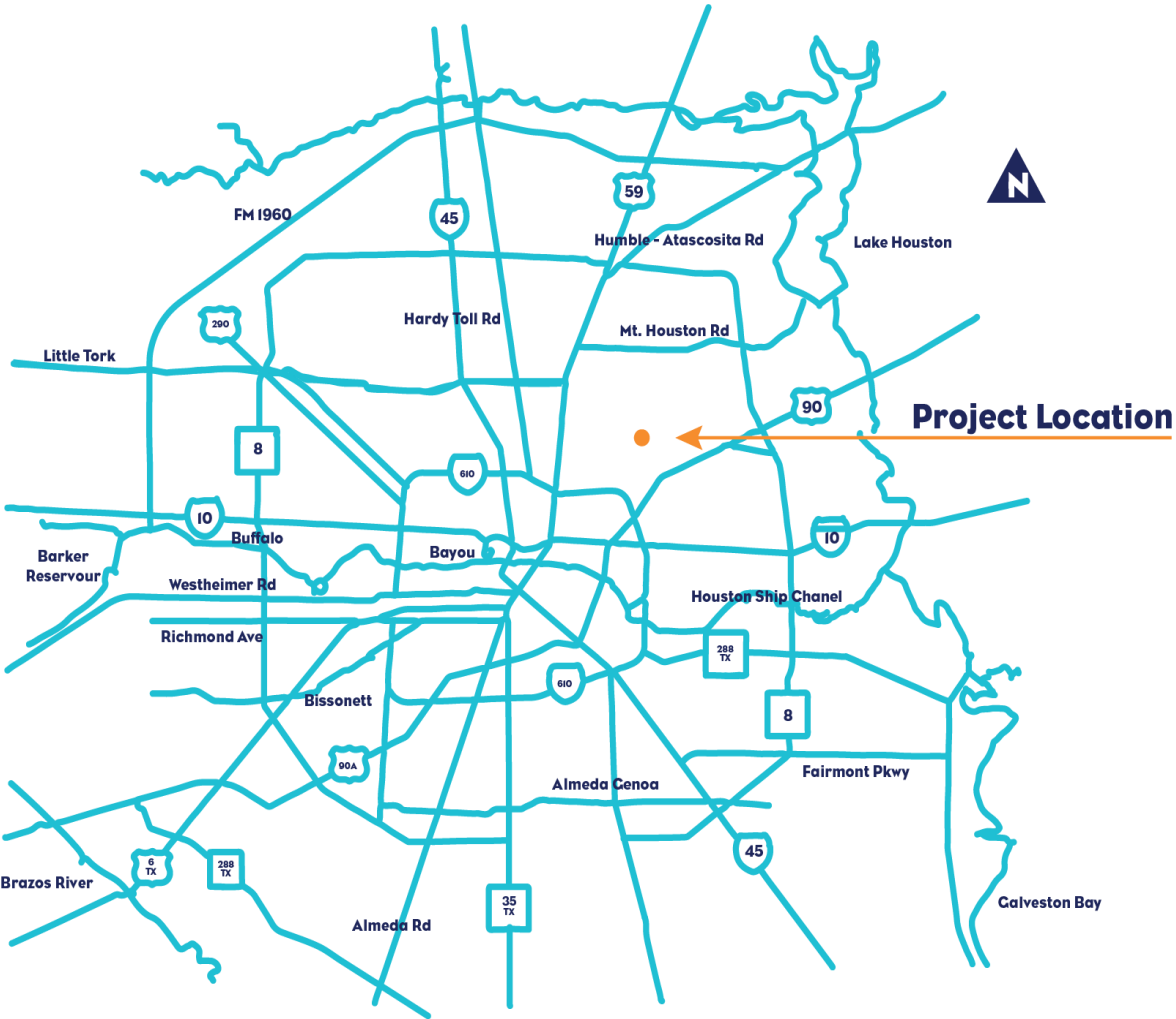
- End of service life
- Undersized for future flows
- Blockages and nuisance odors from siphon



*(Tidwell Timbers WWTP Diversion project is part of the EPA Sanitary Sewer Consent Decree.) **Consent Decree Completion: 2025 Construction Award: FY 2024**
Current Project Status: Mylar



PROJECT LOCATION



Council District B

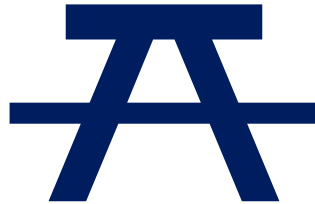
LOCATION DECISION FACTORS

Alternative routes were considered but are not feasible:

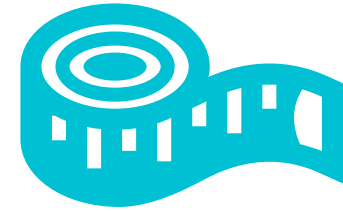


Distance:

Closest road to cross Halls Bayou is Tidwell, 3000 ft west and 1700 ft north of Treatment Plant.

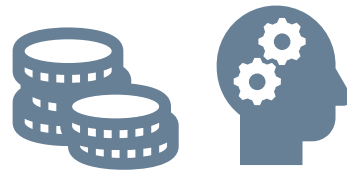


A drainage structure and ditch was built within right-of-way of Seeker St across Halls Bayou as part of the park, requiring realignment of tunnel on park land.



Placement requirements:

- Not placed under drainage ditches
- At least 5 ft of horizontal clearance



Location Decision Post-Factor Considerations:

A pipe crossing Halls Bayou and through the park is the most financially and structurally feasible option.

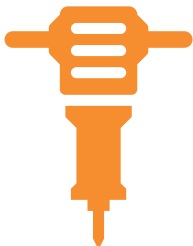
PARK IMPROVEMENTS



Install three additional trees



Install pet disposal station



Demolish manhole and siphon vent



Install permanent gate to prevent parking of cars on grounds



Install two bolted steel benches

CONSTRUCTION IMPACTS

During Construction Work includes:

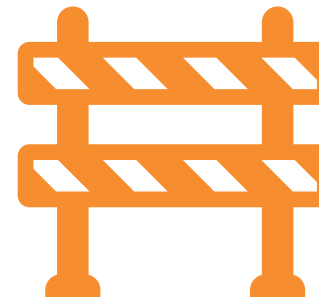
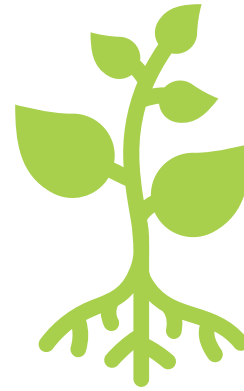
- Removal of dead trees and overgrown vegetation with new trees planted
- Mowing of construction area
- Reseeding of work area with native grass and hydro mulch
- Manhole maintenance and removal
- Permanent clearing for construction staging

Construction Needs:

- One entrance sidewalk closed
- Safety fencing around work area
- Installation of temporary access road for construction entrance

Anticipated Project Duration: 9 Months

Anticipated Project Cost: \$7.05M



Construction Shaft



Fenced Work Area

OVERALL PROJECT BENEFITS

- Improved reliability wastewater service
- Support future growth
- Eliminate siphon
- Demolish siphon vent pipe and manhole
- Install vortex unit to prevent nuisance odors
- Avoids impacts to existing customers
- Improvements to park with tree additional new trees
- Reduced permanent ground structures

OBSERVATIONS



Permanent Wastewater Corridor

- Section 26.001 of the Texas Parks & Wildlife Code provides that the City may not approve any program or project for the use or taking of land designated as parkland unless, after a public meeting.



Temporary Construction Staging Area

- Houston Public Works will require the temporary use of approximately 16, 062 square feet (0.0445 acres) of the DY22-029 Parcel for a variable-width construction staging.

thank you!



HoustonPublicWorks.org



@HouPublicWorks

QUESTIONS?