



TIRZ17 Memorial City Area Detention Basin

PUBLIC ENGAGEMENT

JANUARY 7, 2026

WBS #: M-430296-0017-3



PRESENTATION AGENDA

- 1. Project Introduction
- 2. Key Project Considerations
- 3. Key Stakeholders
- 4. Project Need
- 5. Project Overview and Benefits
- 6. Project Improvements
- 7. Funding and Cost
- 8. Schedule and Next Steps

PROJECT INTRODUCTION

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Project Description:

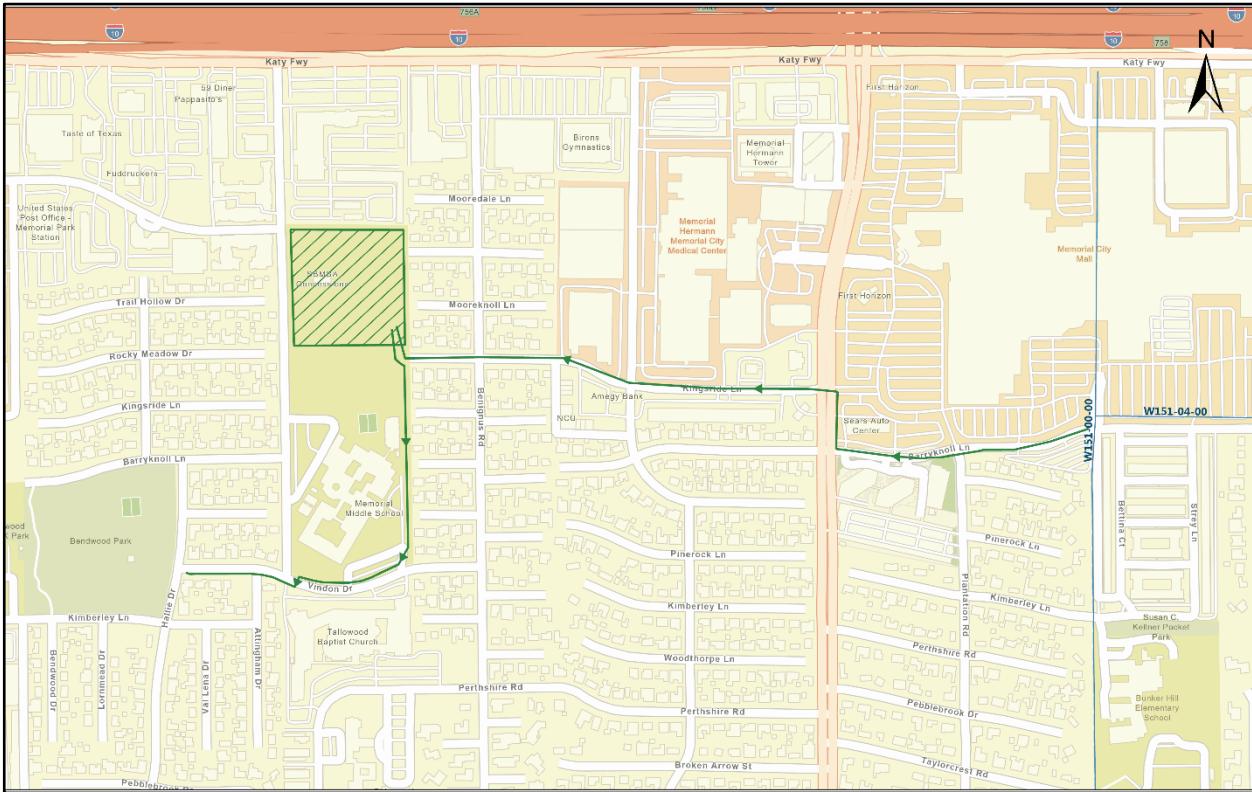
- Regional flood mitigation
- Nearly 95 ac-ft of detention volume

Purpose:

- Reduce the loss of life and property due to flooding (natural disasters)

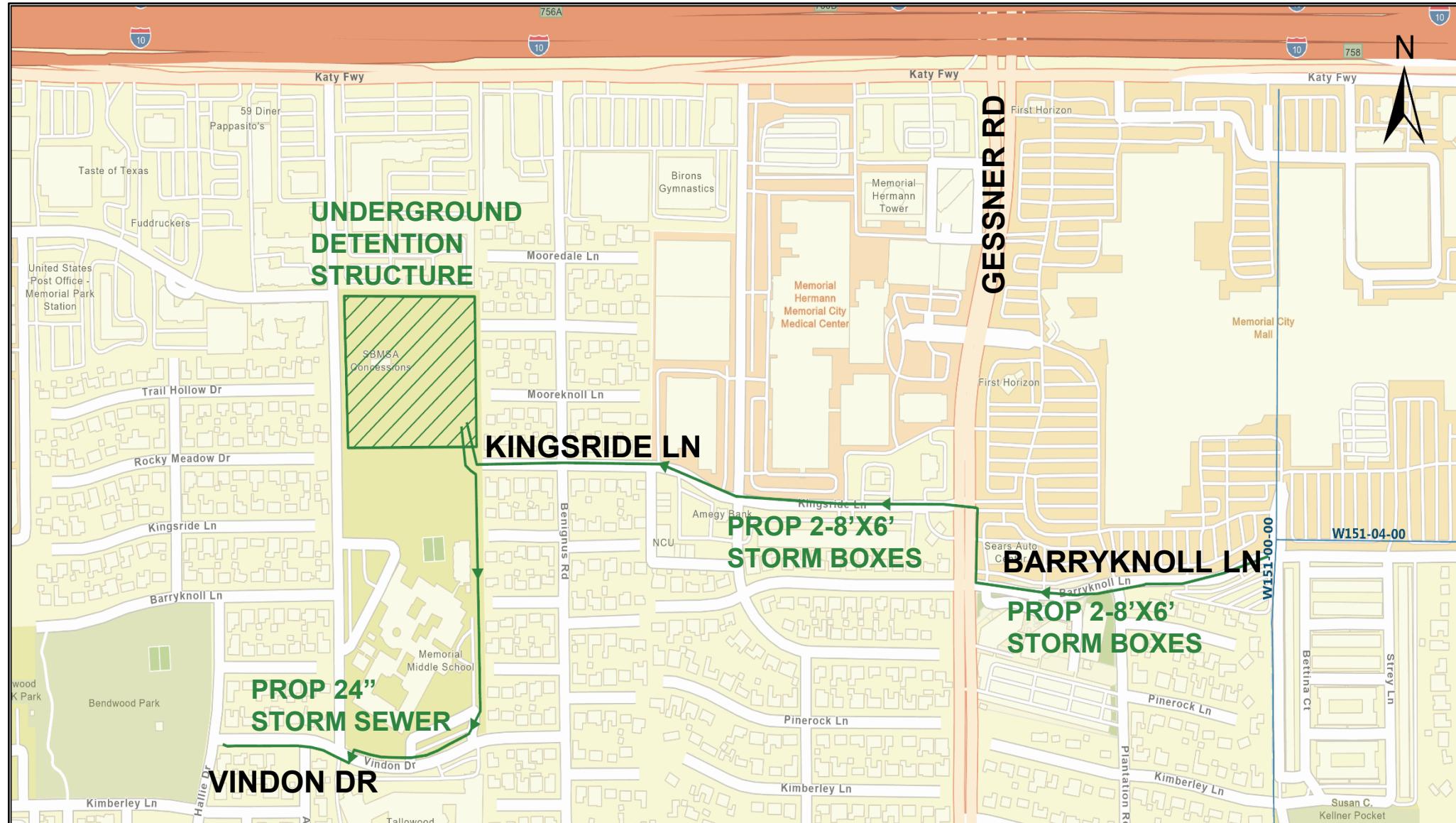
Need:

- Provide relief for ditch W151-00-00, lower the water surface elevation
- Reduce street and structural flooding



**Project Originated from 2014
Regional Drainage Study**

PROPOSED IMPROVEMENTS OVERVIEW



KEY PROJECT CONSIDERATIONS

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- **Flood Mitigation**
- **Safety During and Post Construction**
- **Future Memorial Middle School Reconstruction**

KEY STAKEHOLDERS

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- **Memorial City Mall**
- **Memorial Hermann Memorial City Medical Center**
- **SBISD**
- **SBMSA**
- **Memorial Management District**

PROJECT NEED

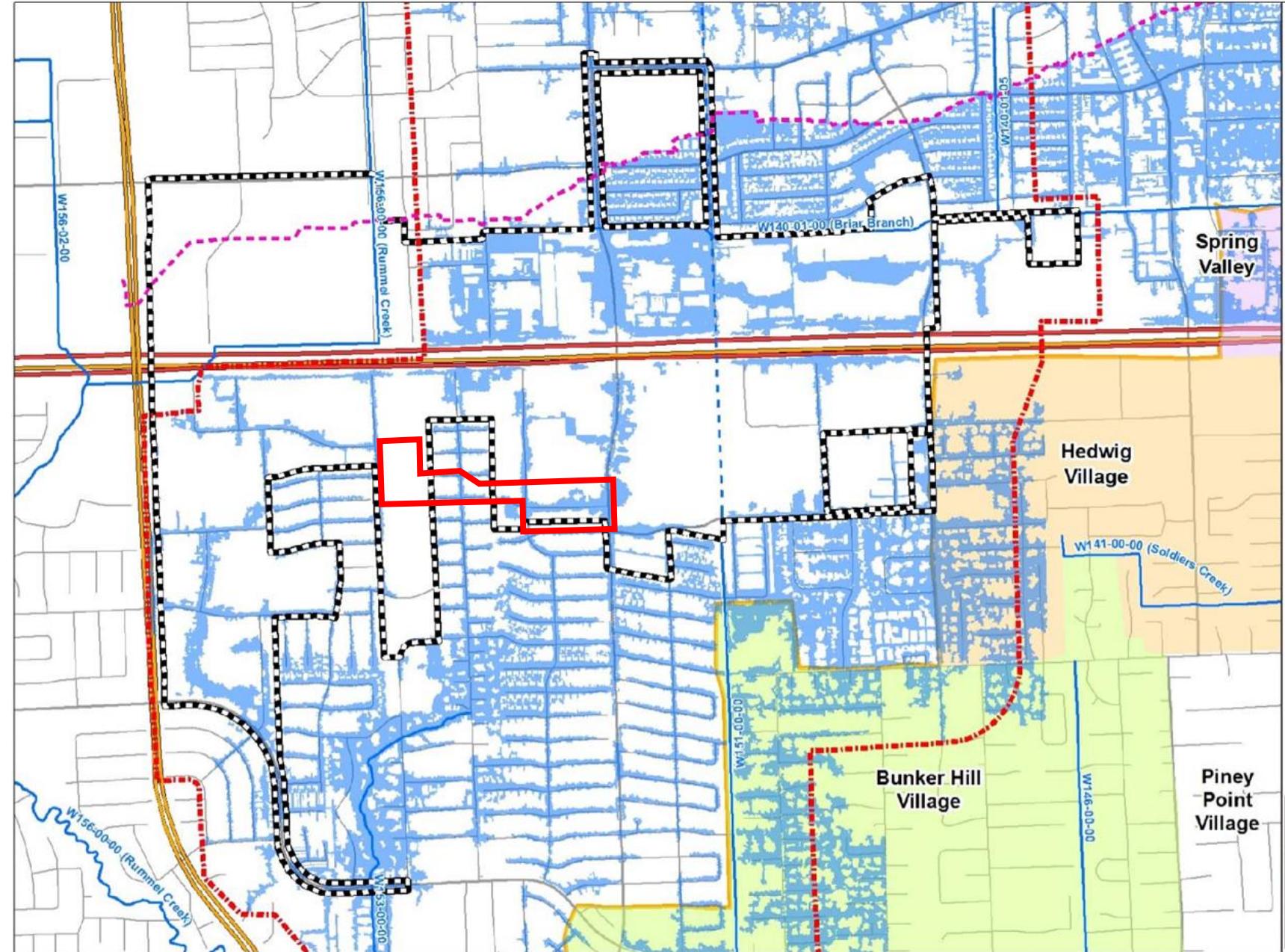
PROJECT NEED

Historical Flooding Events:

- April 2009 Event – 9.5 in / 24 hr
- Memorial Day 2015 – 11.5 in / 24 hr
- Tax Day 2016 – 9.8 in / 24 hr
- Harvey 2017 – 18.6 in / 24 hr
- Imelda 2019 – 7.4 in / 24 hr

Region 2--Brays, Buffalo, Greens, Hunting, Luce, West Fork San Jacinto, and White Oak										
Period	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	2-day
2-year	0.6	1.2	1.7	2.2	2.8	3.1	3.8	4.4	5.1	5.9
5-year	0.7	1.5	2.1	2.8	3.6	4.1	5.0	5.9	6.9	8.1
10-year	0.9	1.7	2.4	3.2	4.3	4.9	6.2	7.4	8.7	10.2
25-year	1.0	2.0	2.8	3.8	5.2	6.2	7.9	9.7	11.5	13.7
50-year	1.1	2.3	3.2	4.3	6.0	7.3	9.5	11.7	14.0	16.8
100-year	1.3	2.5	3.5	4.8	6.9	8.5	11.3	14.0	16.9	20.4
500-year	1.6	3.1	4.4	6.2	9.6	12.2	16.7	20.9	25.0	29.2

PROJECT NEED – APRIL 2016 TAX DAY



PROJECT NEED - EXISTING 100-YR EVENT

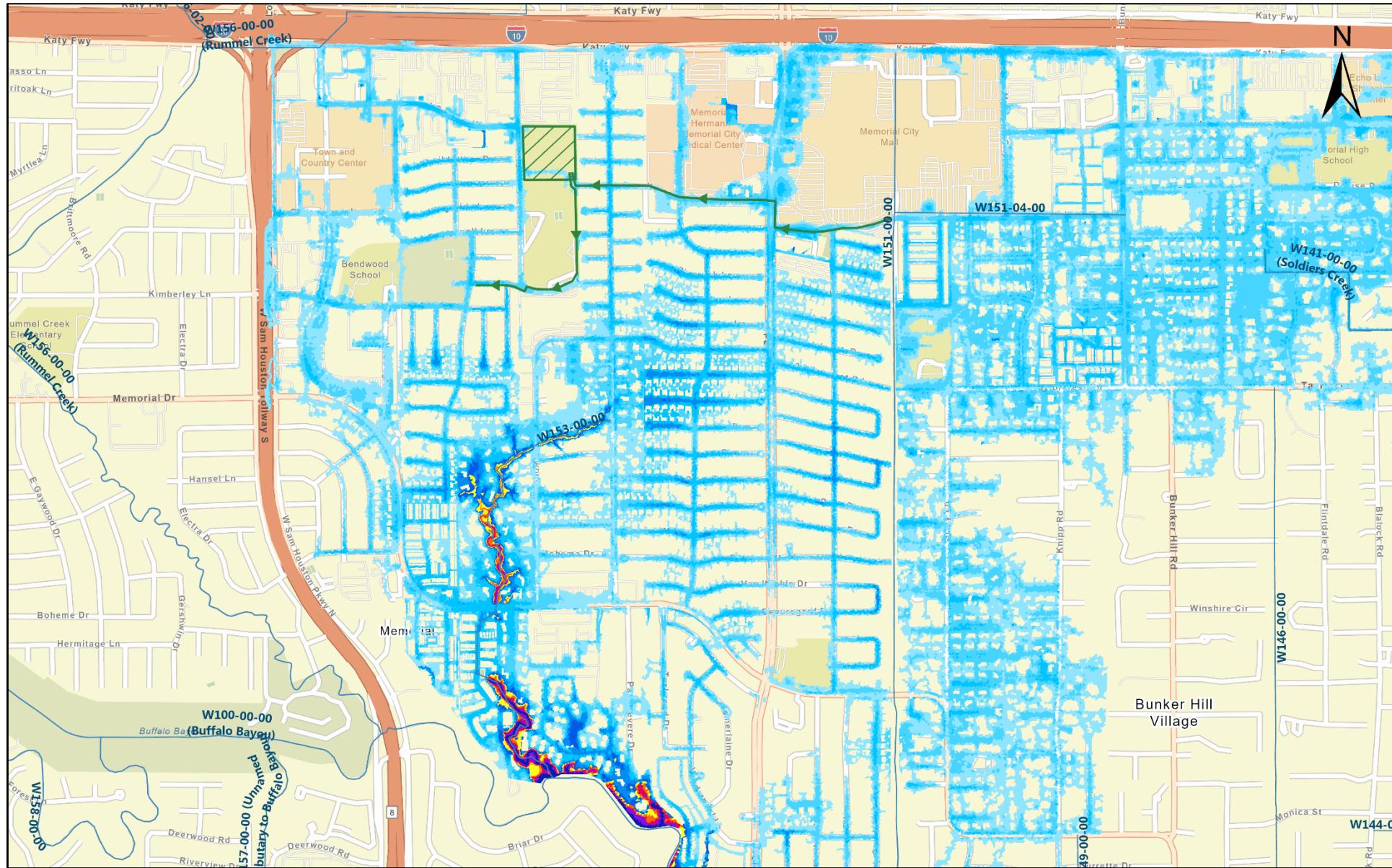
LEGEND

- Storm Sewers
- Detention Basin
- Channels

Existing Ponding Map: 100-YR

Depth (ft)

0.1 - 0.75
0.75 - 1.5
1.5 - 2.75
2.8 - 5
5 - 7.75
7.8 - 11.25
11.3 - 15
15.1 - 20
20 - 23.5
23.6 - 29.5



PROJECT OVERVIEW AND BENEFITS

PROJECT BENEFITS – PROPOSED 100-YEAR EVENT

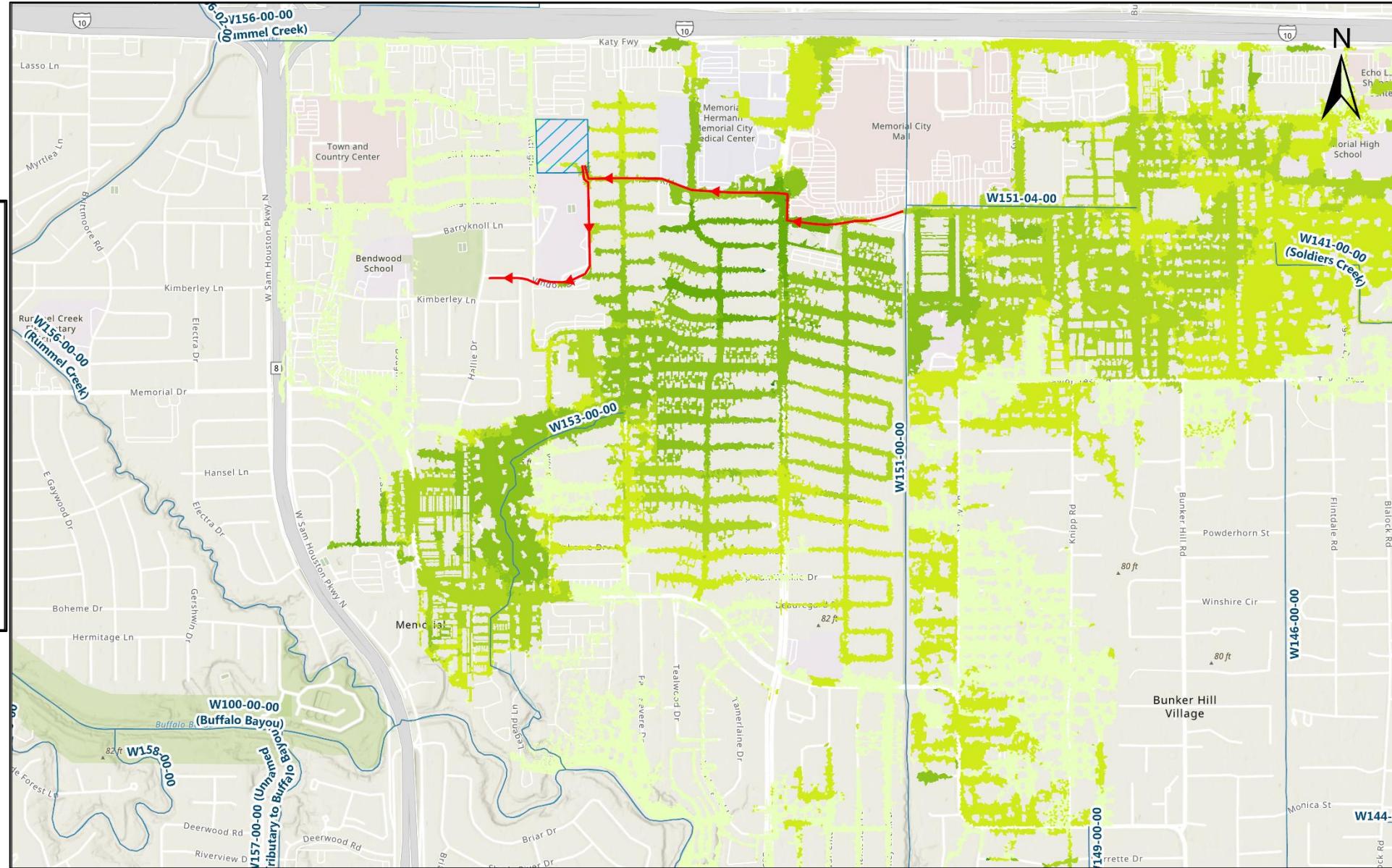
LEGEND

- ▶ Storm Sewers
 - Channels
 - ▨ Detention Basin

Proposed Ponding Map: 100-YR

Flooding Reduction (Ft)

-3.095	--1
-0.999	--0.75
-0.749	--0.5
-0.499	--0.25
-0.249	--0.1
-0.099	--0.05
-0.049	--0.01
-0.009	0



PROJECT BENEFIT

Financial Impact:

- Flood Damage Avoidance Benefit ~ \$82M
- Property Value and Property Tax Influence
- SBISD Tax Base Benefits

Non-Financial Impact:

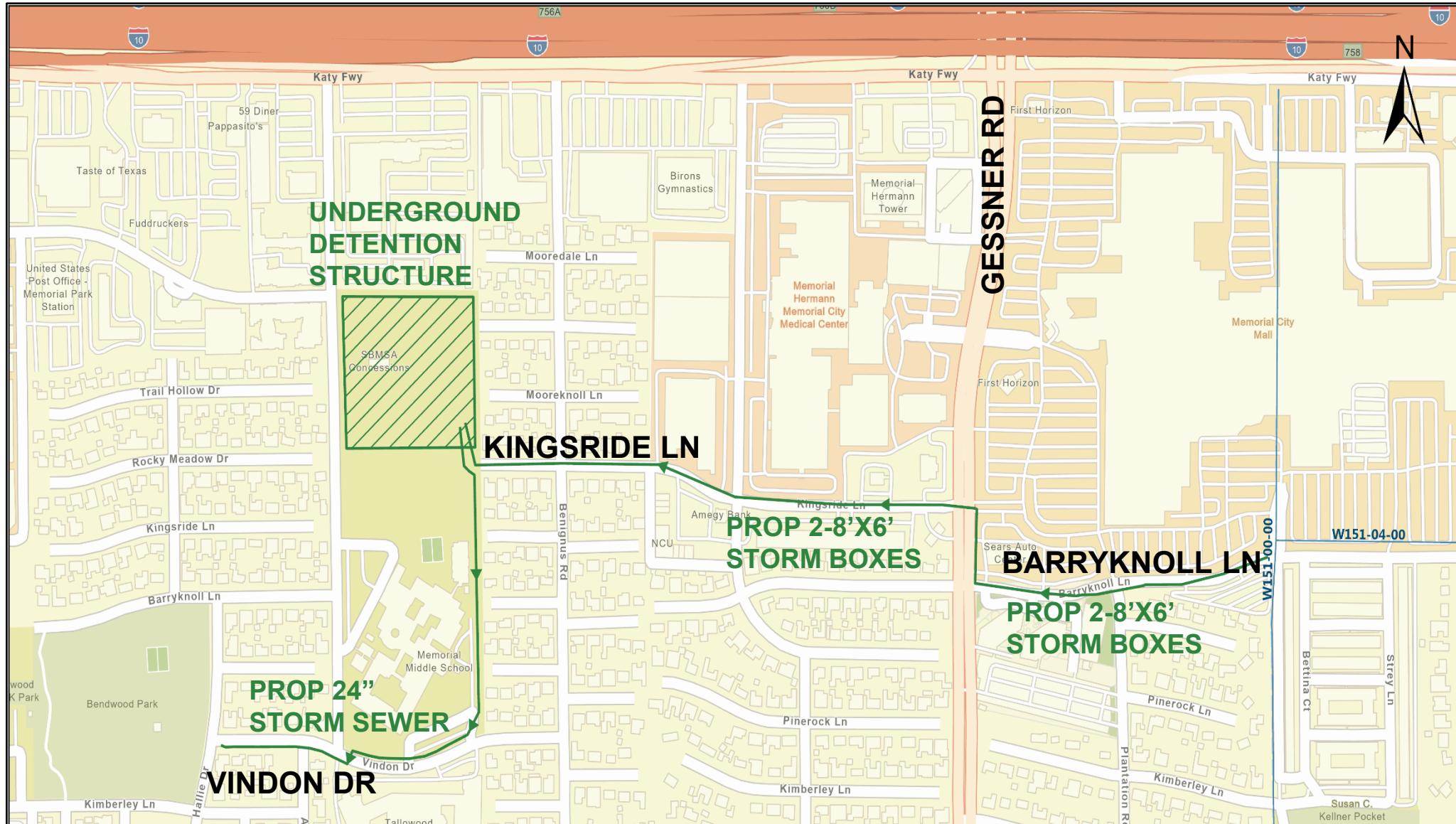
- Homeowner and Student Piece of Mind

Flood Reduction (approximate):

- Structures Removed from Flooding (100-yr): 111
- Structures with Reduced Flood Risk (100-yr): 775
- Structures Removed from Flooding (10-yr): 52
- Structures with Reduced Flood Risk (10-yr): 265
- Inundation Area Reduction (Acres): 37 (100-yr)

PROJECT IMPROVEMENTS

STORM BOXES UNDER ROADWAYS



STORM SEWERS – TWO PARALLEL 8-FT BY 6-FT STORM BOXES



UNDERGROUND DETENTION STRUCTURE – 95 AC-FT



Structural Loading to Accommodate Future School Building

ROADWAY IMPROVEMENTS

Kingsride Ln

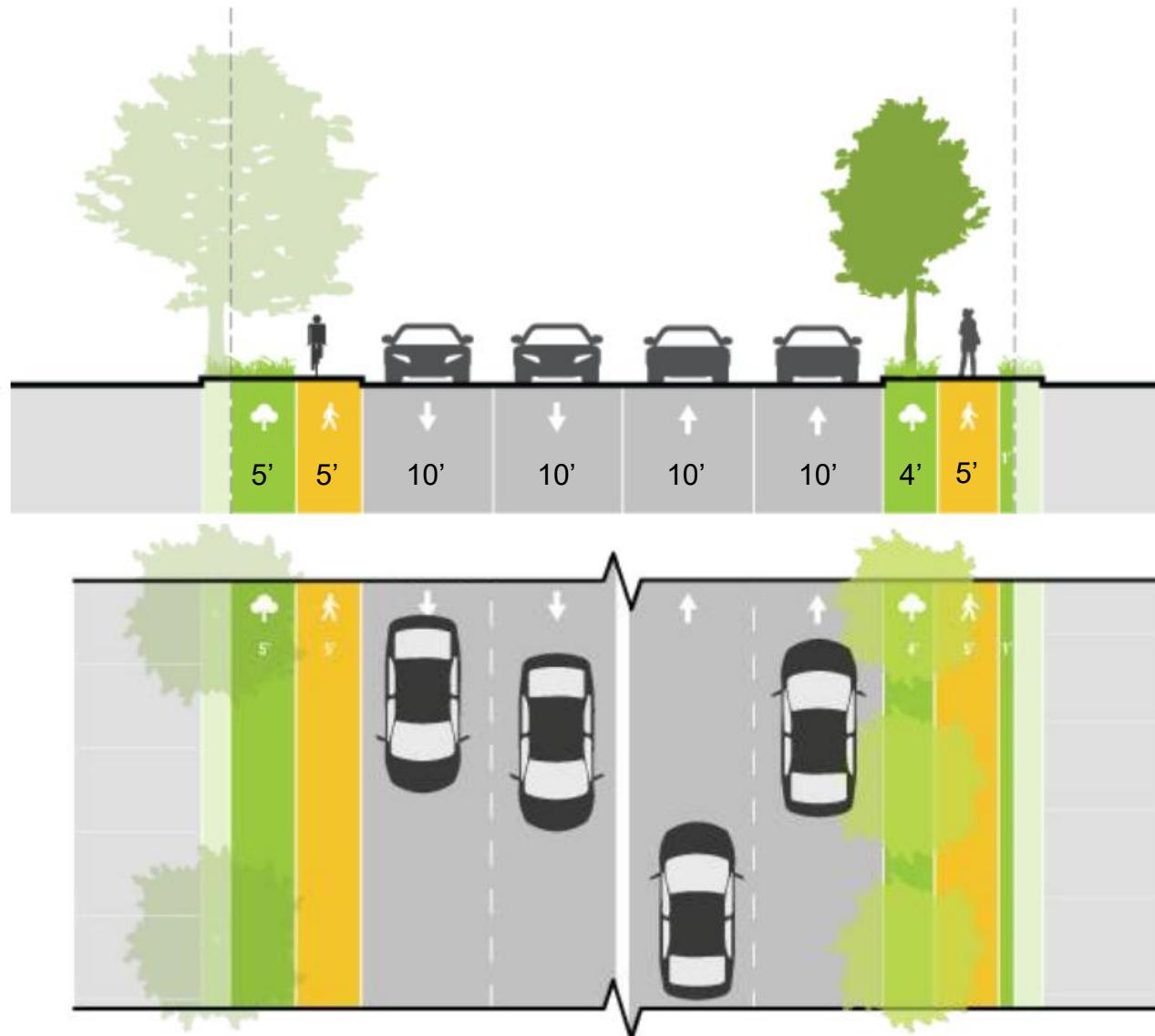
- Neighborhood



ROADWAY IMPROVEMENTS

Kingsride Ln

- Commercial Area



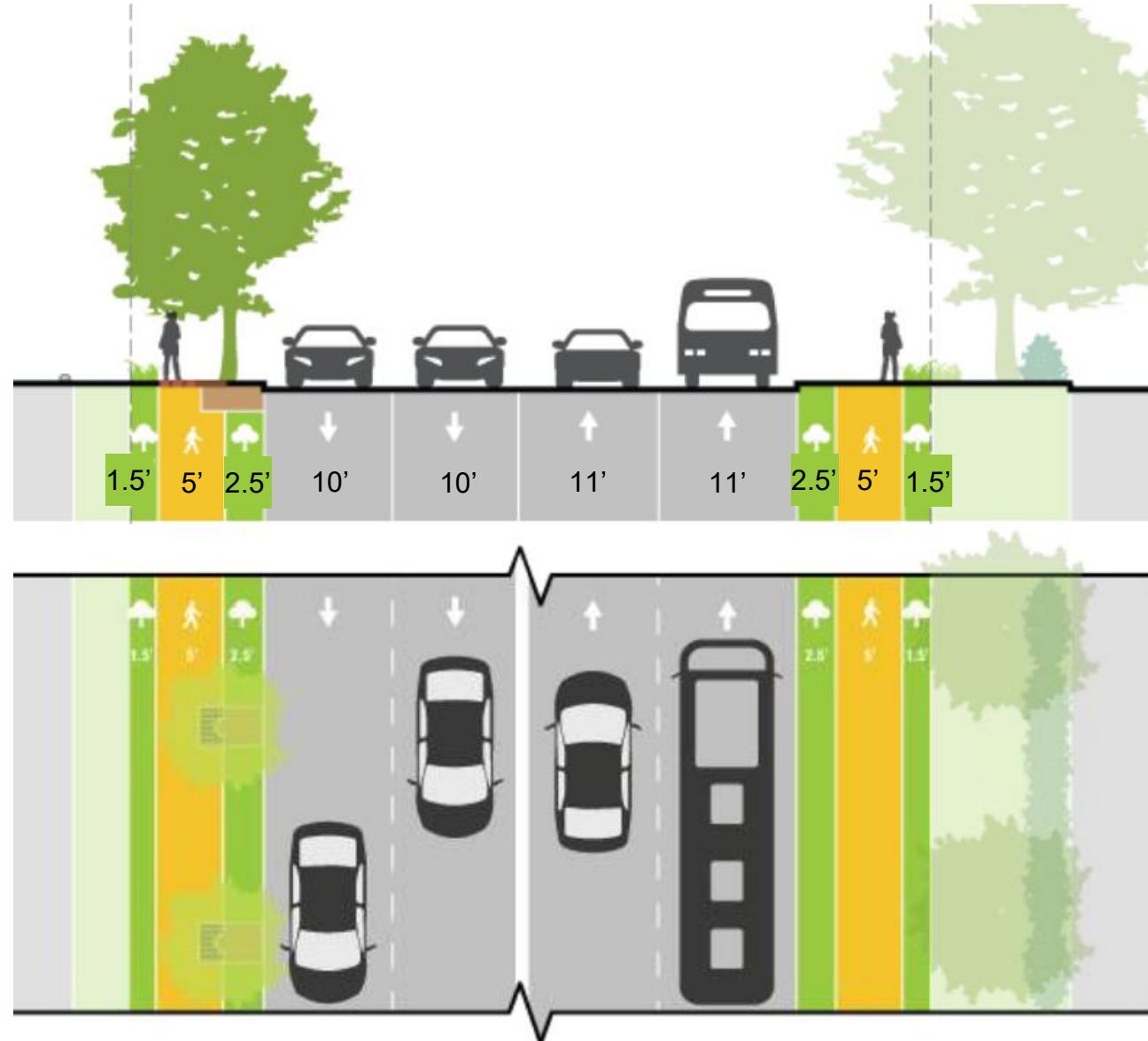
ROADWAY IMPROVEMENTS

Barryknoll Ln

- Commercial Area

Vindon Dr

- Storm sewer is behind curb. (Not shown)



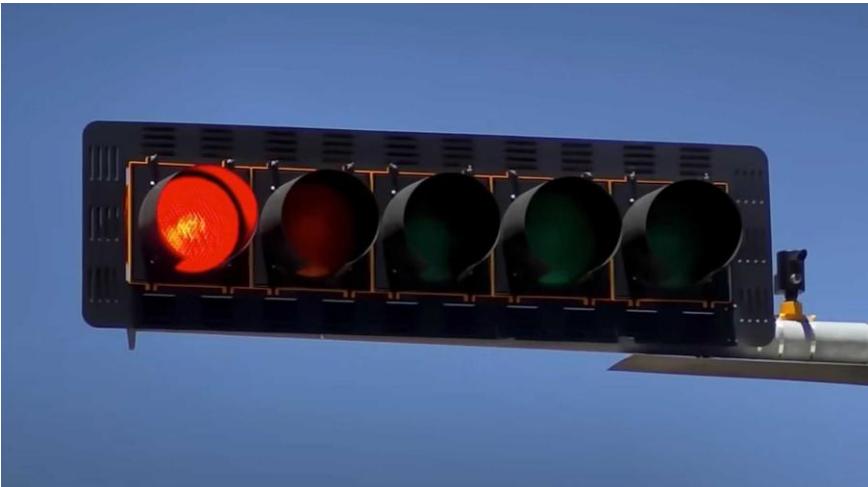
ROADWAY SAFETY



Low Speed Limit



Speed Cushions - Kingsride



Traffic Signals



Traffic Calming Circle – Kingsride at Benignus

SIDEWALK SAFETY



Pedestrian Signals



Truncated Dome
Warning Devices



Audible Pedestrian Signals



Wheelchair Ramps

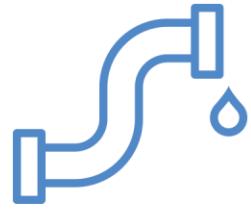


Crosswalk



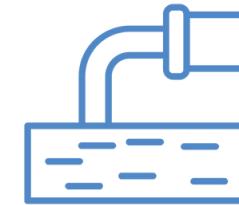
Safety Buffer

PROJECT BY THE NUMBERS ICONS



12,850

Linear Ft. of Stormwater



550

Linear Ft. of Wastewater Lines



7,360

Linear Ft. of New Sidewalk



2,230

Linear Ft. of Water Lines



0.8

Miles of New Pavement



Minimized Tree Removal
Individualized Tree Protection Plan
Planting New Trees



147,000

Cubic Yards Excavation/Haul

FUNDING AND COST

LEAD AGENCIES AND PARTNER



*Lead
Federal
Agency*

FEMA



*Recipient of
HMGP Funding*

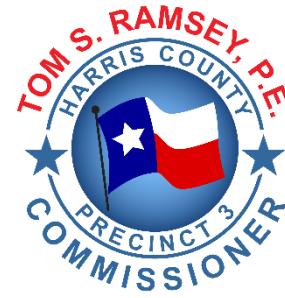


*Lead
Non-Federal
Agency*



*Sub-Recipient
of HMGP
Funding*

*Funding
Partners*



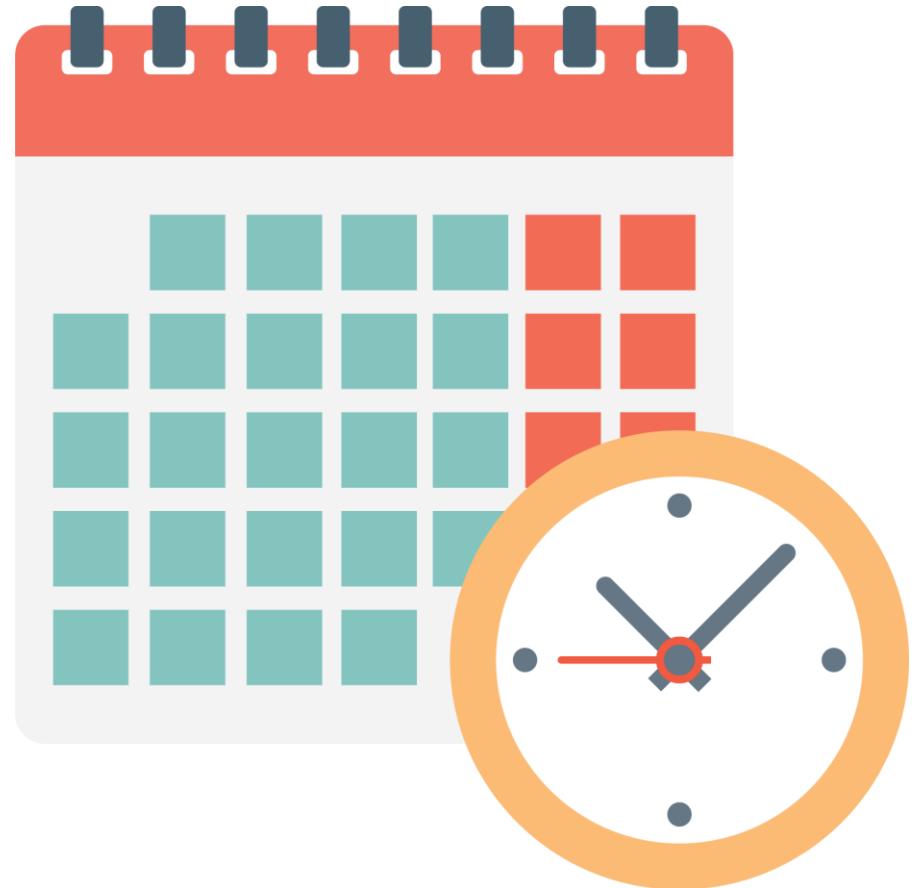
PROJECT COST

<u>Total Project Cost:</u>	<u>\$86M</u>
Federal Grant:	\$26.5M
HCFCD and Harris County Pct 3 (Ramsey):	\$20M
City of Houston / TIRZ 17:	\$39.5M

SCHEDULE AND NEXT STEPS

PROJECT SCHEDULE

- Design Completion: Spring 2026
- Construction Start: Winter 2027
- Overall Construction Duration: ~2 to 3 years
- Vault Construction: ~1.5 to 2 years



KEY NEXT STEPS

- Drainage Easement Acquisition – SBISD Board Action Required

**HAVE QUESTIONS?
DISCUSS WITH PROJECT TEAM OR
EMAIL THE CP ENGAGE TEAM
AT**

engageteam@houstontx.gov

OPEN HOUSE PORTION OF MEETING

Thank you!



HoustonPublicWorks.org



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