



I-45 NHHIP

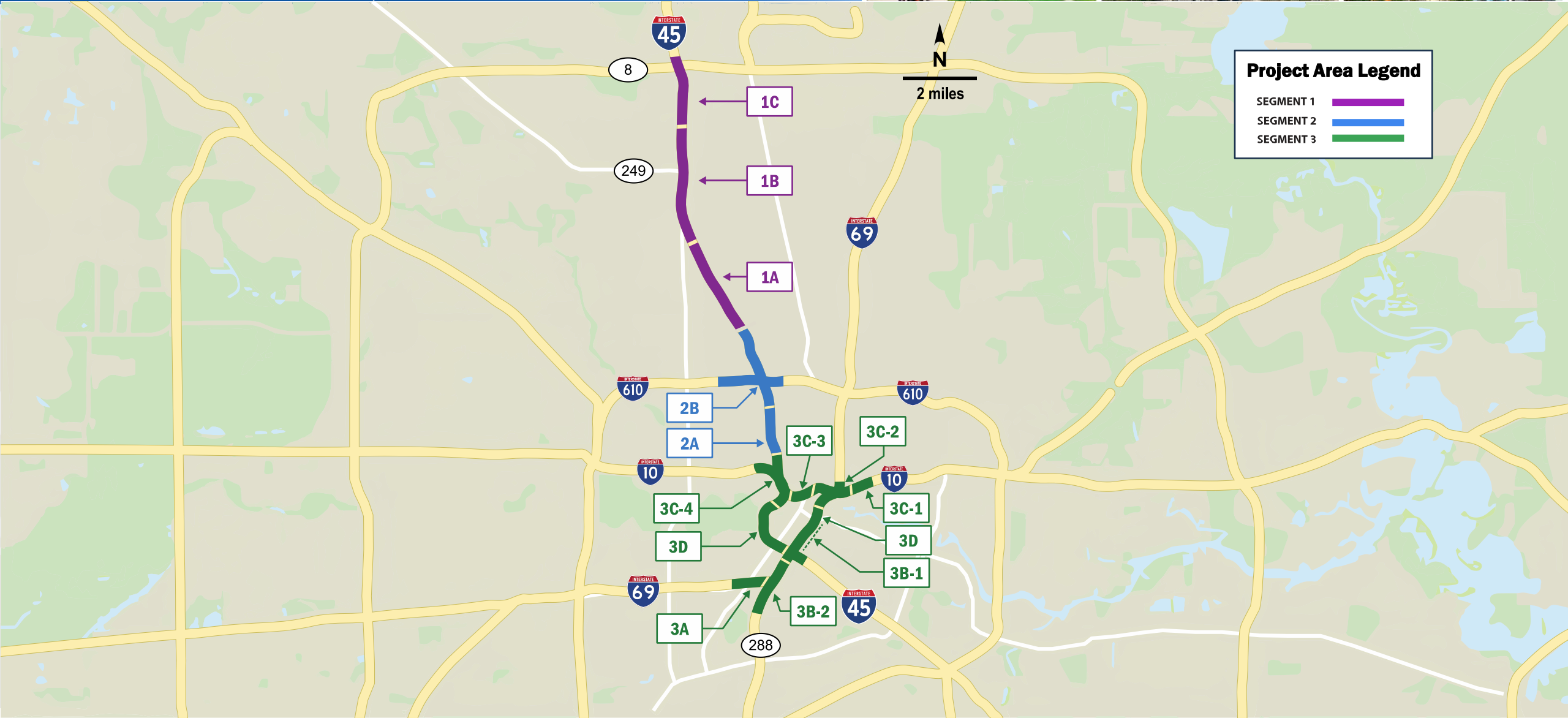
Changes for the Better

Presentation to Midtown Houston

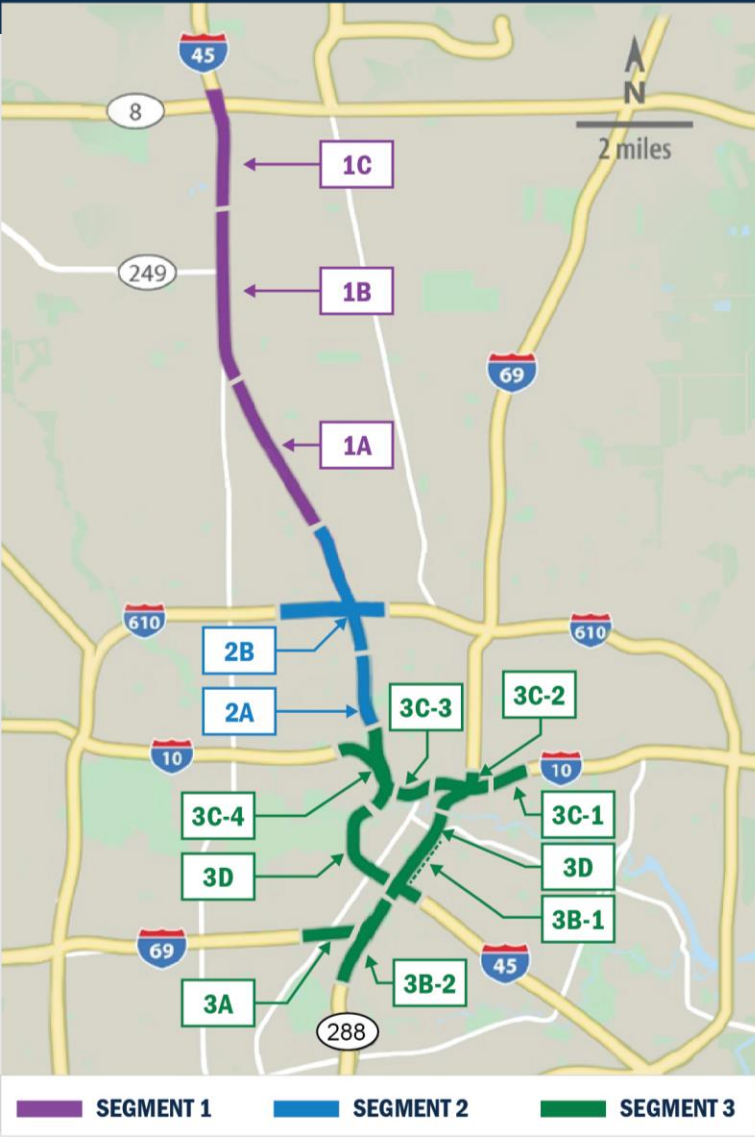
Wednesday, September 4, 2024



Project Overview



TxDOT MOVING FORWARD WITH NHHIP



CONSTRUCTION PHASING

preliminary, subject to change

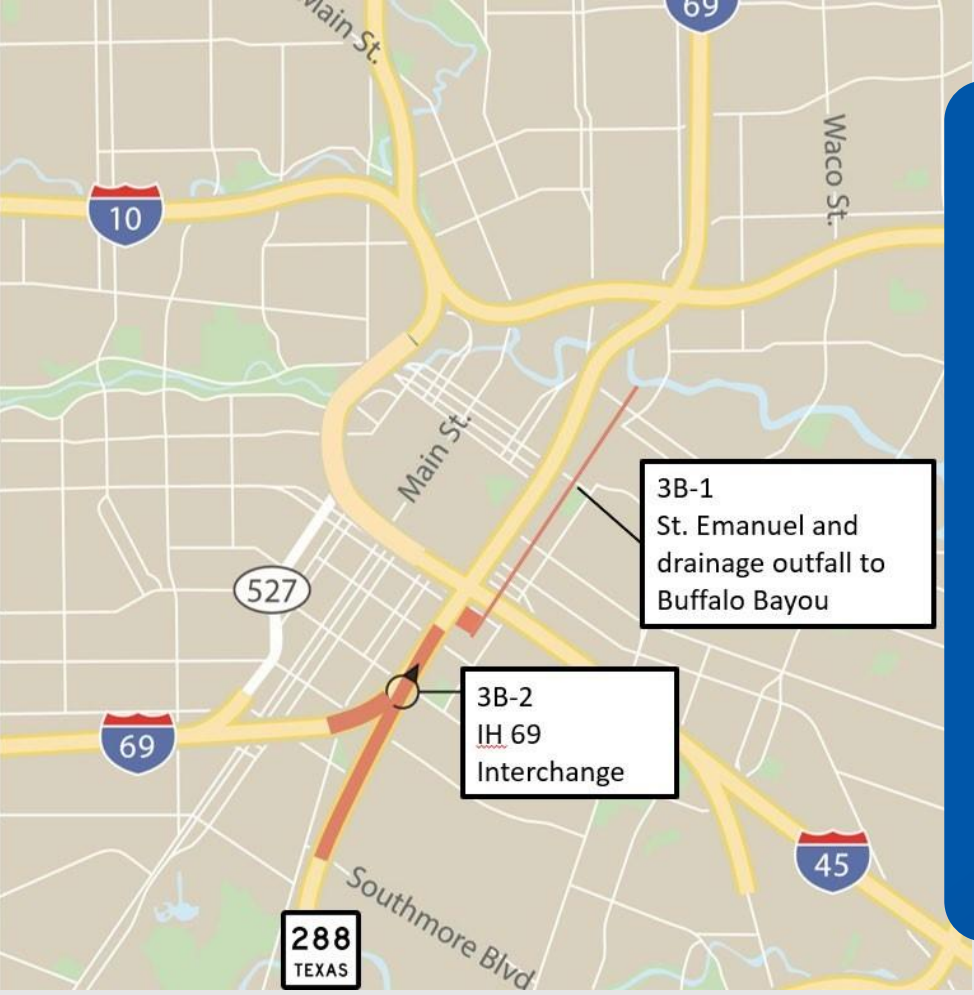
| INDEPENDENT PROJECTS | KEY COMPONENTS | Year | | | | | | | | | | | | | | | | | ESTIMATED CONTRACT COST |
|----------------------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|-------------------------|
| | | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | | | |
| 3A | Depressed main lanes, cap structures, ped. Realm | | | | | | | | | | | | | | | | | | \$639,360,000 |
| 3B-1 | Drainage project for 3B-2 | | | | | | | | | | | | | | | | | | \$121,800,000 |
| 3B-2 | Depressed main lanes, arch bridges, ped. Realm | | | | | | | | | | | | | | | | | | \$550,000,000 |
| 3C-1 | Main lane reconstruction, UPRR crossing | | | | | | | | | | | | | | | | | | \$150,000,000 |
| 3C-2 | I-69 alignment shift, detention, south canal | | | | | | | | | | | | | | | | | | \$1,358,790,000 |
| 3C-3 | Bridges, UHD, METRO red line | | | | | | | | | | | | | | | | | | \$250,000,000 |
| 3C-4 | Future I-10 Exp. Lanes, Downtown connections, Detention, trails | | | | | | | | | | | | | | | | | | \$848,875,000 |
| 3D | Depressed main lanes, cap structure, realign I-45 | | | | | | | | | | | | | | | | | | \$1,785,000,000 |
| 2A | I-45 Max Lanes, cap structure, detention | | | | | | | | | | | | | | | | | | \$604,800,000 |
| 2B | I-45 Max Lanes, continuous frontage roads through interchange | | | | | | | | | | | | | | | | | | \$1,015,400,000 |
| 1A | I-45 Max Lanes, bike/ped facilities along frontage roads, detention | | | | | | | | | | | | | | | | | | \$296,800,000 |
| 1B | I-45 Max Lanes, bike/ped facilities along frontage roads, detention | | | | | | | | | | | | | | | | | | \$386,400,000 |
| 1C | I-45 Max Lanes, bike/ped facilities along frontage roads, detention | | | | | | | | | | | | | | | | | | \$224,000,000 |

- 3B-1 is phased to start before 3B-2 because drainage elements in 3B-1 need to be constructed and operational to receive drainage from 3B-2.
- ▲ 3C-2 is phased to start before 3D because proposed I-69 in 3C-2 needs to be constructed and operational to receive proposed I-69 in 3D. (Proposed I-69 in 3D is unable to be connected to existing I-69 in 3C-2)
- 3C-4 is phased to start before 2B because drainage elements in 3C-4 need to be constructed and operational to receive drainage from 2B.



Segment 3 Initial Construction Projects





Package 1, St. Emanuel Street from Buffalo Bayou to McIlhenny Street

- Estimated Construction Cost: \$121.8M
- Construction anticipated to begin October 2024.
- Construction of drainage outfall to Buffalo Bayou including drainage culverts and detention pond, and reconstruction of St. Emanuel.



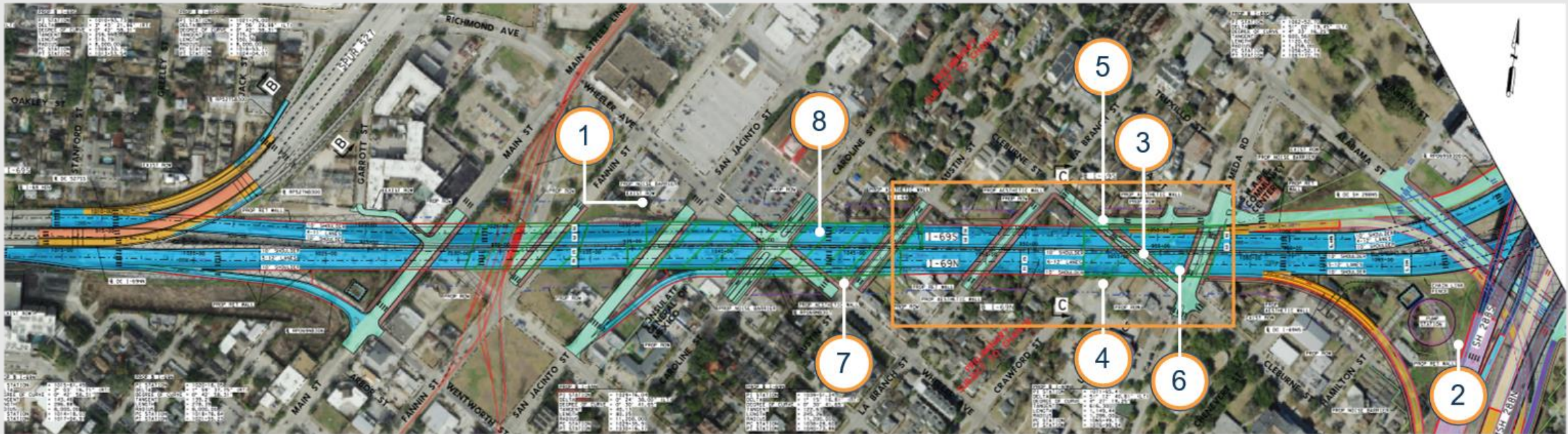
Package 2, I-69 between SH 288 and I-45 South (3B)

- Estimated Construction Cost: \$550M
- Construction anticipated to begin in 2025.
- Active public engagement will continue through construction completion.
- Opportunity for arch bridges to incorporate signature design reflecting community input.

Segment 3 Overall Map and Segment 3A



Segment 3A Proposed Design Changes for Reevaluation



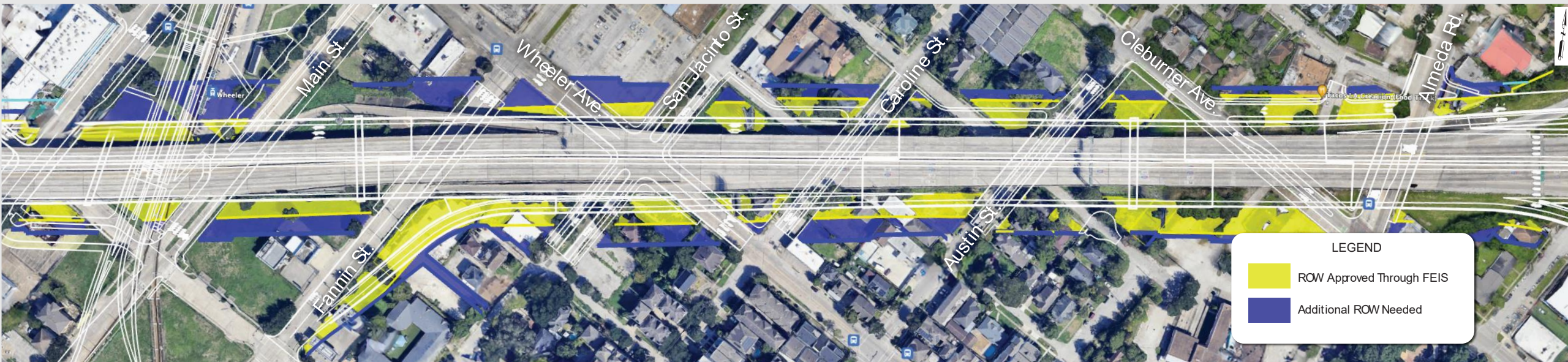
- 1. Additional Right of Way (ROW) required to accommodate retaining wall soil anchors.**
- 2. Install pump station and head box within existing ROW to pump water during heavy rain events.**
- 3. Extend Cleburne Street across I-69, preserving an important connection between the Third Ward and Midtown.**
 - Comments from City of Houston, Midtown Management District, and Greater Southeast Management District
- 4. Remove proposed I-69 northbound frontage road between La Branch Street and Almeda Road.**
 - Requested by City of Houston and management districts
- 5. Shorten I-69 southbound frontage road to end at Cleburne St. instead of at Caroline St.**
 - Requested by City of Houston and management districts
- 6. Develop Cleburne St. bridge with bridge beams perpendicular to I-69.**
 - Results in deck cap and enhancement opportunity
- 7. Develop potential roadway cap which would increase cap area from Wheeler Ave. and Caroline St., to include San Jacinto and Austin streets.**
- 8. Construction of temporary I-69 mainlane bridges to accommodate traffic during construction.**
 - 3-lane northbound and southbound bridges
 - 38-foot wide, will carry mainlane traffic during construction of below grade section



Segment 3A ROW Needs



Segment 3A ROW Comparison Map



LEGEND

- ROW Approved Through FEIS
- Additional ROW Needed

Segment 3A Additional ROW Needs Accommodation of Retaining Wall Soil Anchors

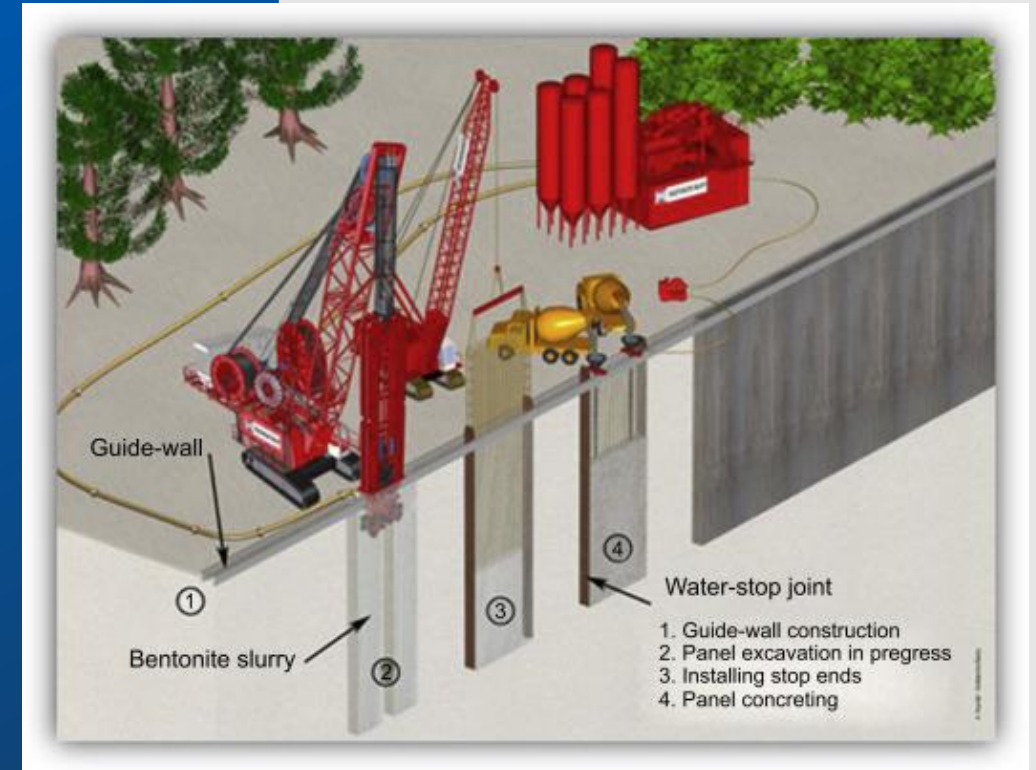


Specialized Walls (D-Walls) needed due to shallow groundwater:

- ✔ D-Walls are built as solid concrete rectangular sections (or panels).
- ✔ The sections or panels are interlocked with watertight vertical joints.
- ✔ D-Walls water tightness prevents water seepage into the roadway and subsidence behind the walls from lowering the groundwater.

Soil Anchors are needed to help stabilize the tall D-Walls in order to:

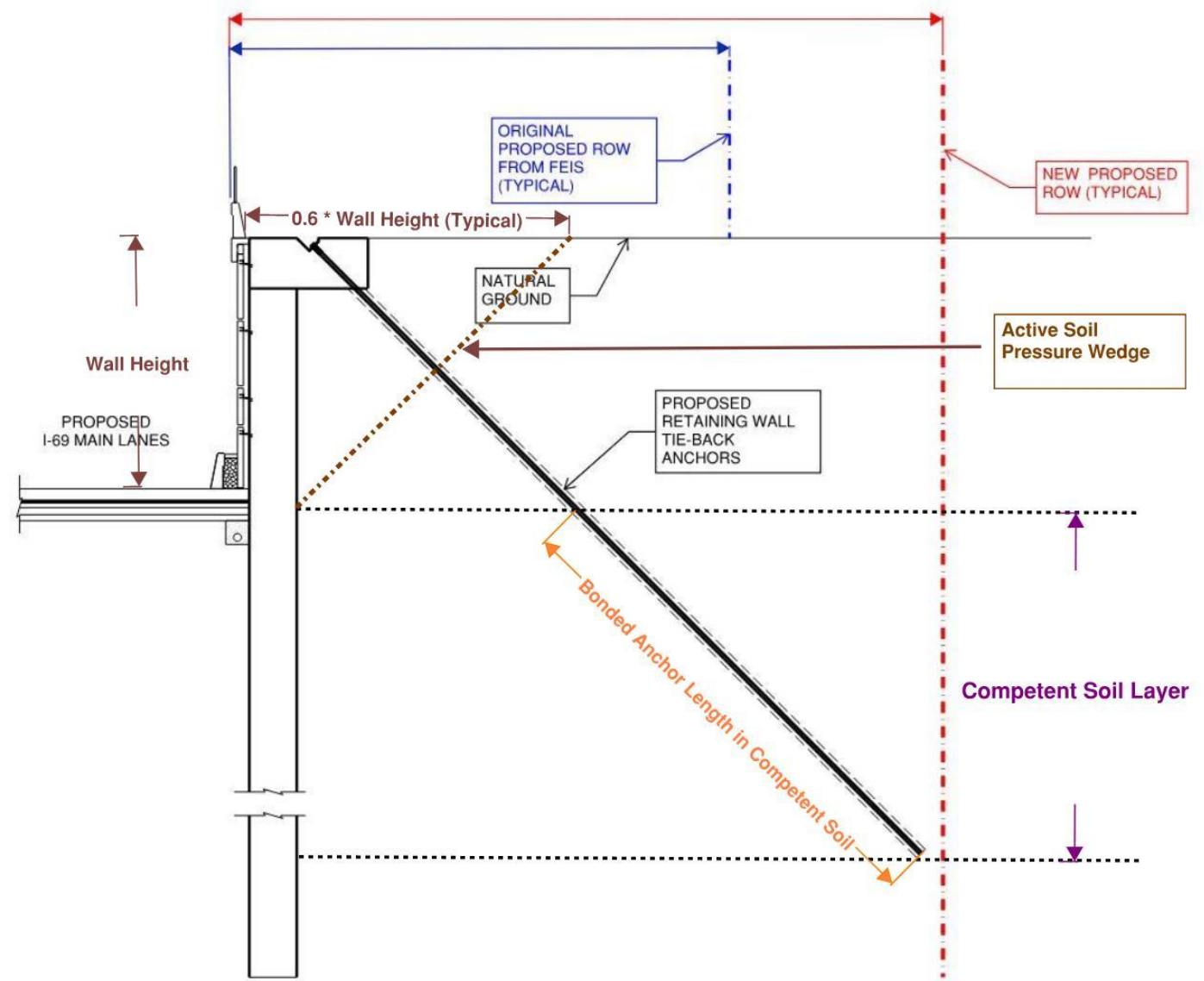
- ✔ Reduce wall movement
- ✔ Reduce ground movements behind the walls



Why do the Retaining Wall Soil Anchors Require Additional ROW?



Here are the D-Wall and Anchors Typical Section & Design Considerations





Proposed Temporary Mainlane Bridges



Why Build Temporary Mainlane Bridges?



Using existing I-69 bridge for traffic during construction would:

- ✔ **Reduce existing travel lanes to 2 narrow lanes in each direction** for at least 3 years, and to 2 lanes for one direction for at least another 2 years
- ✔ **Require continuous wall to be built** in the middle of the freeway for the entire length of the project

Constructing temporary bridges in both directions for length of the project:

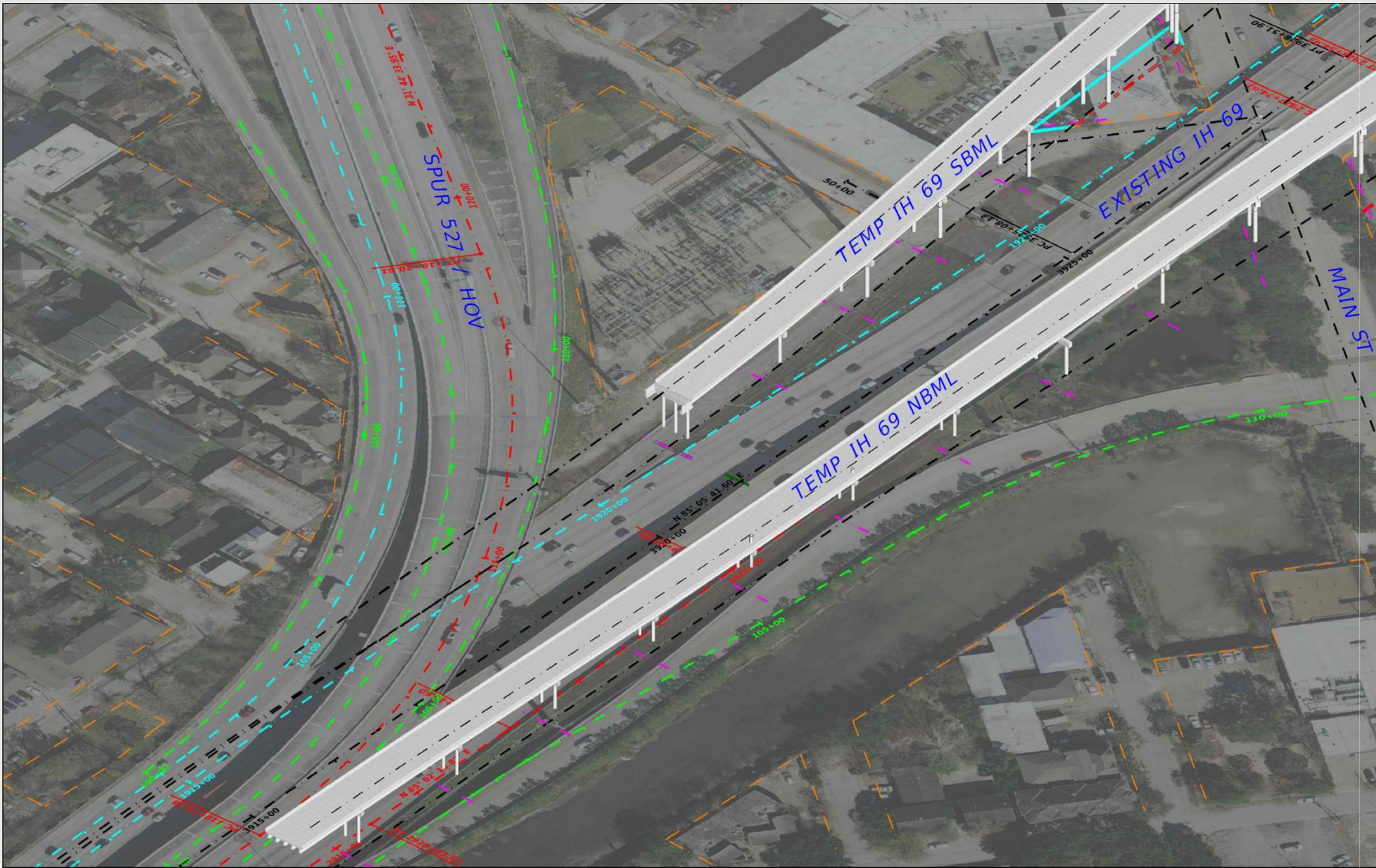
- ✔ **Allows 3 travel lanes in both directions to be maintained**, reducing travel impacts
- ✔ **Isolates traffic away from construction zone**, improving safety

Proposed Temporary Mainlane Bridges



I-69 Northbound & Southbound Temporary Bridges, Spur 527 to Main St.

Preliminary Subject To Change

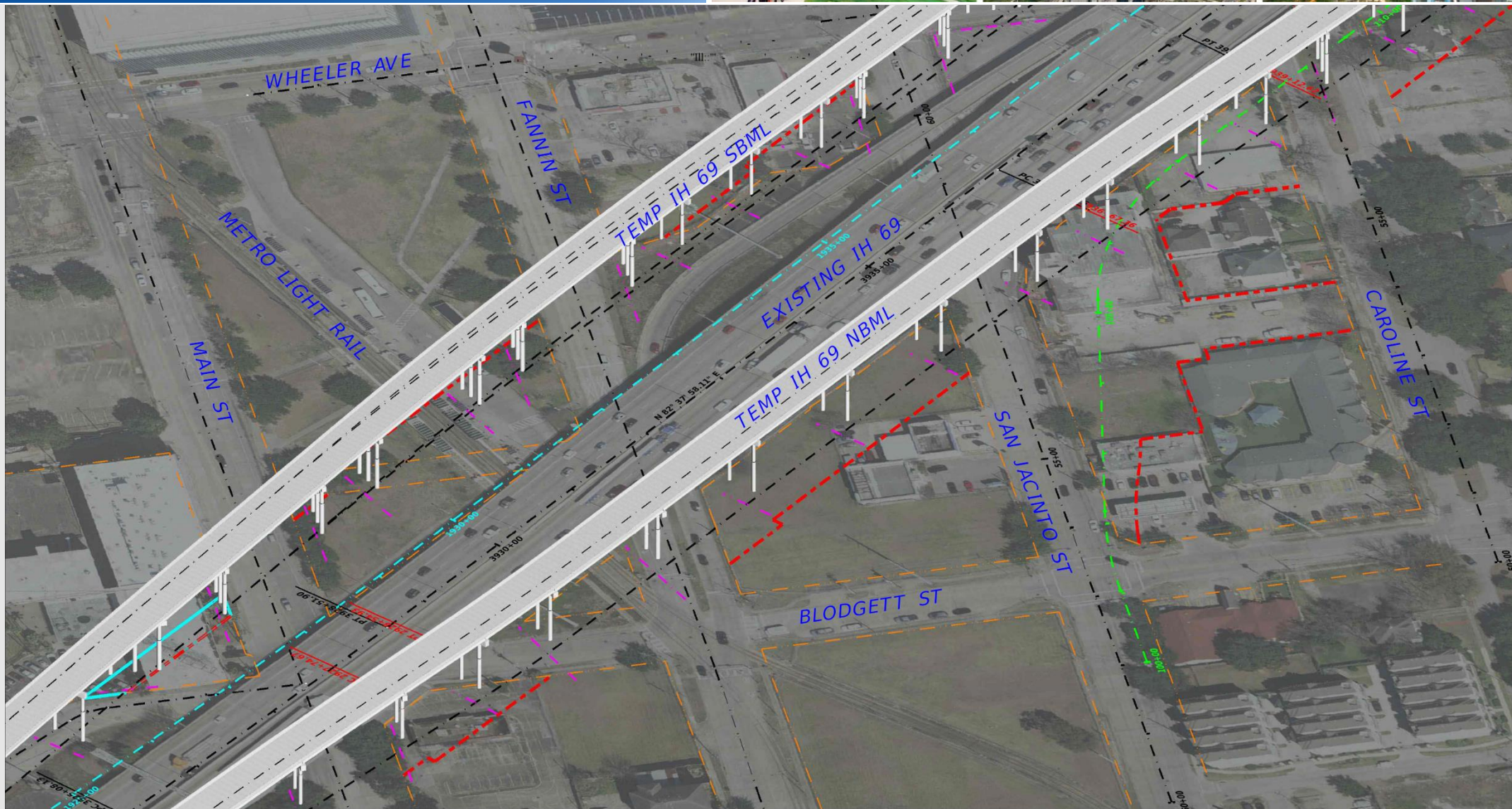


Why Build Temporary Mainlane Bridges?



I-69 Northbound & Southbound Temporary Bridges, Main St. to Caroline St.

Preliminary Subject To Change

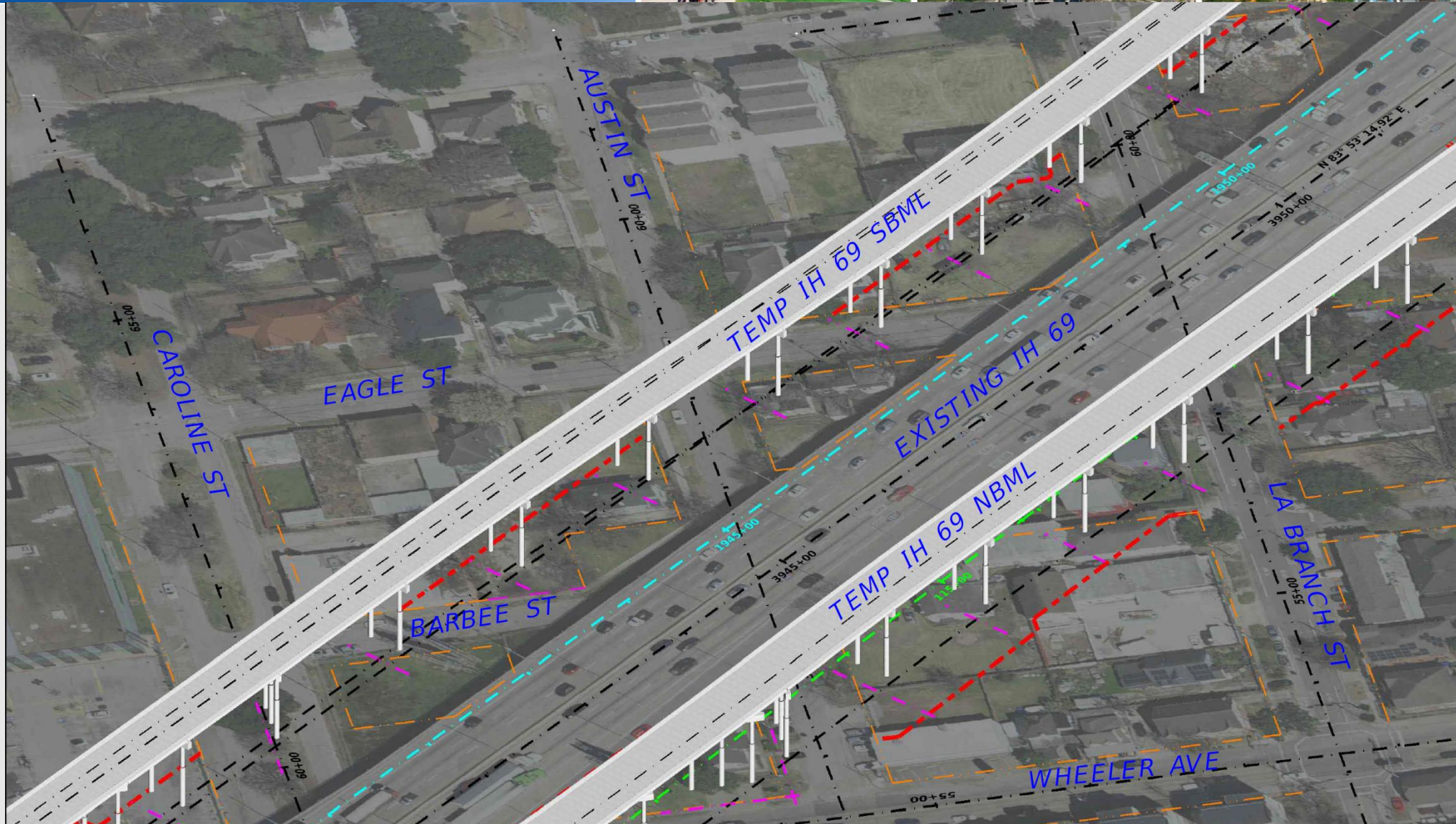


Why Build Temporary Mainlane Bridges?



I-69 Northbound & Southbound Temporary Bridges, Caroline St. to La Branch St.

Preliminary Subject To Change



Why Build Temporary Mainlane Bridges?



I-69 Northbound & Southbound Temporary Bridges, La Branch St. to Alameda Rd.

Preliminary Subject To Change



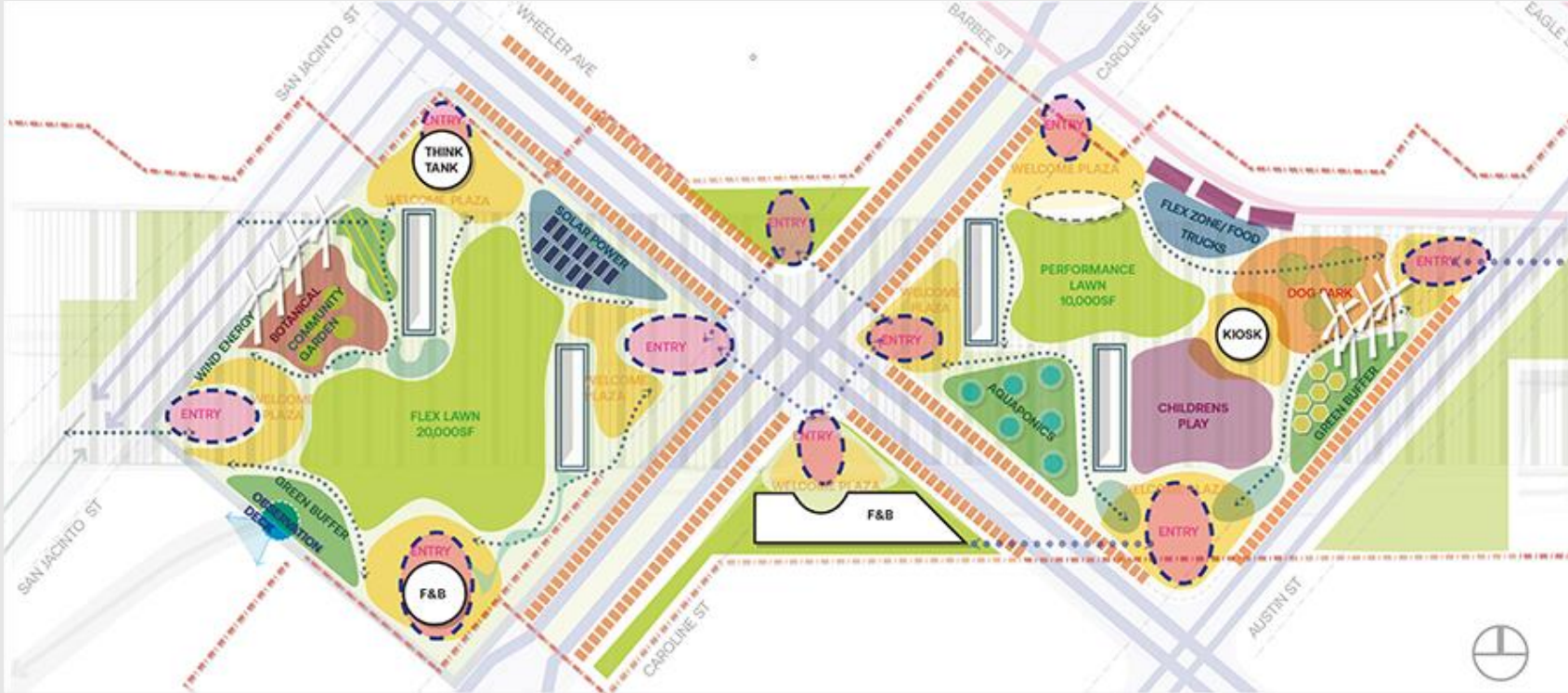


CAPS: The Art of the Possible

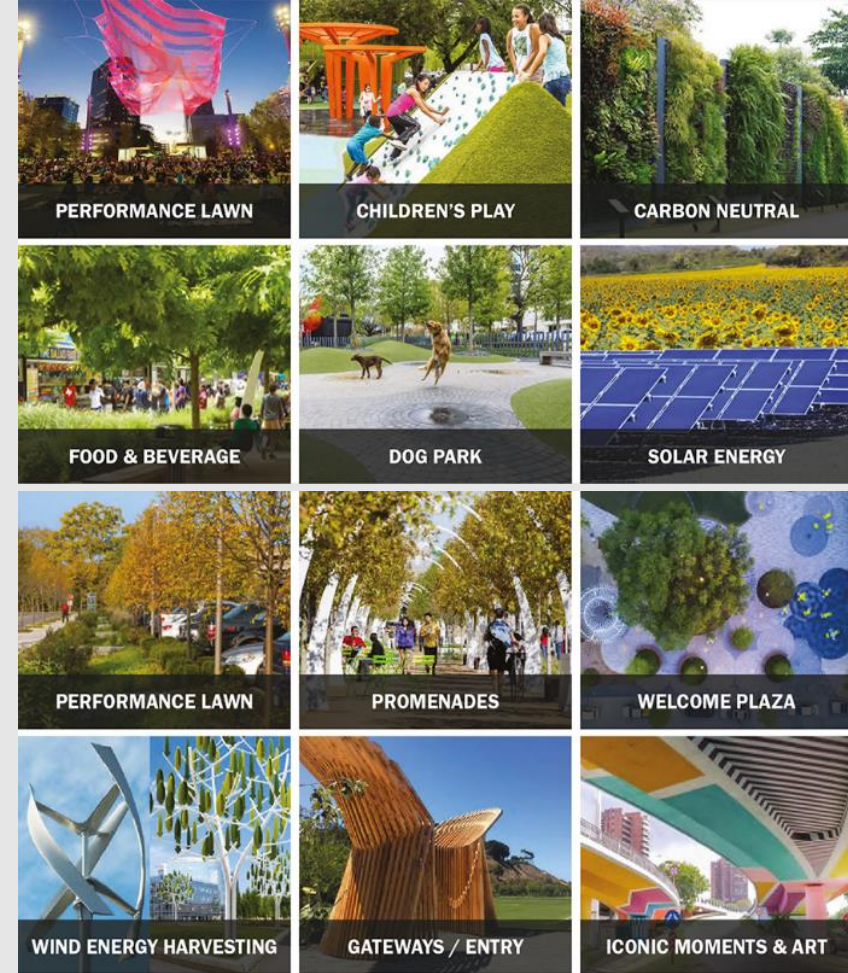


Segment 3A

CAPS: The Art of the Possible



- WELCOME ENTRY
- GREEN BUFFER
- PLAY GARDEN
- BUILDING
- STREET PARKING
- PLAZA
- FLEXIBLE LAWN
- DOG PARK
- BOTANICAL EXPERIENCE
- PEDESTRIAN CIRCULATION
- AQUAPONICS
- APIARIES
- FLEX SPACE
- PROMENADE





Public Engagement



Upcoming I-45 Public Meeting



I-45 North Houston Highway Improvement Project (NHHIP)



YOU'RE INVITED! PUBLIC MEETING CHANGES FOR THE BETTER

The Texas Department of Transportation (TxDOT) invites you to attend an in-person public meeting to discuss the I-45 North Houston Highway Improvement Project (NHHIP).

The Interstate (I) 45 NHHIP public meeting will focus on the proposed design changes for Segment 3A, seeking feedback from the public in an open house format. Segment 3A project limits are from US 59/I-69 at Spur 527 to State Highway 288. The meeting will also provide updates on Segment 3 project activities, including the status and requirements under the Voluntary Resolution Agreement (VRA) between TxDOT and the Federal Highway Administration (FHWA). A map depicting the full project limits, including all three segments, is available at: (www.txdot.gov/nhhip/project-segments/project-map.html). The virtual public meeting, which will consist of a pre-recorded presentation, will be available in both English and Spanish starting on Thursday, Sept. 19, 2024, by 5 p.m. on the project website www.txdot.gov/nhhip.

SEGMENT 3A PUBLIC MEETING
THURSDAY, SEPT. 19, 2024
5 - 7 P.M.

Young Women's College Preparatory Academy
1906 Cleburne St.
Houston, TX 77004

I-45 SEGMENT 3A PROJECT LIMITS

The I-45 NHHIP Segment 3 encompasses the reconstruction of the downtown Houston freeway loop system, including I-45, I-69, I-10, and SH 288. In Segment 3, I-45 will be rerouted from the west side of downtown Houston to run parallel with I-69 and I-10 until it exits the downtown area and continues north. Segment 3A, which has project limits from US 59/I-69 at Spur 527 to SH 288, is shown on the map to the right.



■ SEGMENT 3A

The public meeting will be conducted in English with Spanish interpreters available. If you need an interpreter or document translator because English or Spanish is not your primary language or have difficulty communicating effectively in English or Spanish, one will be provided to you free of charge. If you have a disability and need assistance, special arrangements can be made to accommodate most needs. If you need interpretation or translation services or you are a person with a disability who requires an accommodation to attend and participate in the public meeting, please contact Gabriel Adame, Public Engagement Coordinator, at 713-802-5199 or Gabriel.Adame@txdot.gov no later than 4 p.m., Friday, Sept. 13, 2024. Please be aware that advance notice is required as some services and accommodations may require time for the project team to arrange.

French: Veuillez appeler le 713-802-5199 pour demander des aménagements spéciaux ou si vous avez besoin d'interprétation / de traduction.

Arabic: يرجى الاتصال بـ 713-802-5199 أو اطلب ترتيبات خاصة أو إذا كنت بحاجة إلى تفسير / ترجمة.

Somali: Fadlan wac 713-802-5199 ei aad u codsato qodobdo gaar ah ama haddii aad u baahan tahay tarjumaad / turjumaan.

Swahili: Tafadhali piga simu kwa 713-802-5199 ili kuomba malazi maalum au ikiwa unahitaji ukalimani au utafsiri.

Kinyarwanda: Mwishanganye ku 713-802-5199 kugirango mwishyure ibisabishijwe byihutirwa cyangwa niba mufitte ubutabera bwo guhumurizwa/guhindurwa ku rurimi.

Mandarin: Mandarin (traditional Chinese): 知出席和参与会议需要特殊照顾或需要口译/翻译, 请拨打 713-802-5199

Mandarin: (simplified Chinese): 知出席和参与会议需要特殊照顾或需要口译/翻译, 请拨打 713-802-5199

Vietnamese: Xin hãy gọi 713-802-5199 nếu bạn cần sự hỗ trợ đặc biệt hoặc người phiên dịch.
Creole: Tanpri rele 713-802-5199 pou mande aranjman espesyal oubyen si ou bezwen entèprèt oubyen tradiktà.

COMMENTS OR QUESTIONS

- Feedback from the public regarding the project may be submitted in any language by mail to: TxDOT I-45 NHHIP Ombudsman, TxDOT Houston District P.O. Box 1386 Houston, Texas 77251-1386
- Feedback may also be submitted by email to: nhhip.ombudsman@txdot.gov.

All comments must be submitted or postmarked by Friday, Oct. 4, 2024.





2024 I-45 NHHIP Public Meetings Schedule

SEPTEMBER 19, 2024

**Segment 3A
Re-evaluation
In-Person**

OCTOBER 15 & 17, 2024

**Segments
1 & 2
In-Person & Virtual**

DECEMBER 2024

**Segment 3 Virtual Public
Meeting**



Question & Answer





Mohamed K. Bur, P.E.

Interim TxDOT Houston District Engineer (DE)
713-802-5001

Varuna Singh, P.E.

TxDOT Houston District Deputy Engineer (DDE)
713-802-5011 / Varuna.Singh@txdot.gov

Raquelle W. Lewis

TxDOT Southeast Communications/PIO Director
713-802-5071 / Raquelle.Lewis@txdot.gov