PUBLIC MEETING

US 81 / US 287 FRONTAGE ROADS: AVONDALE TO I-35W

From Avondale-Haslet Road to I-35W
Tarrant County, Texas

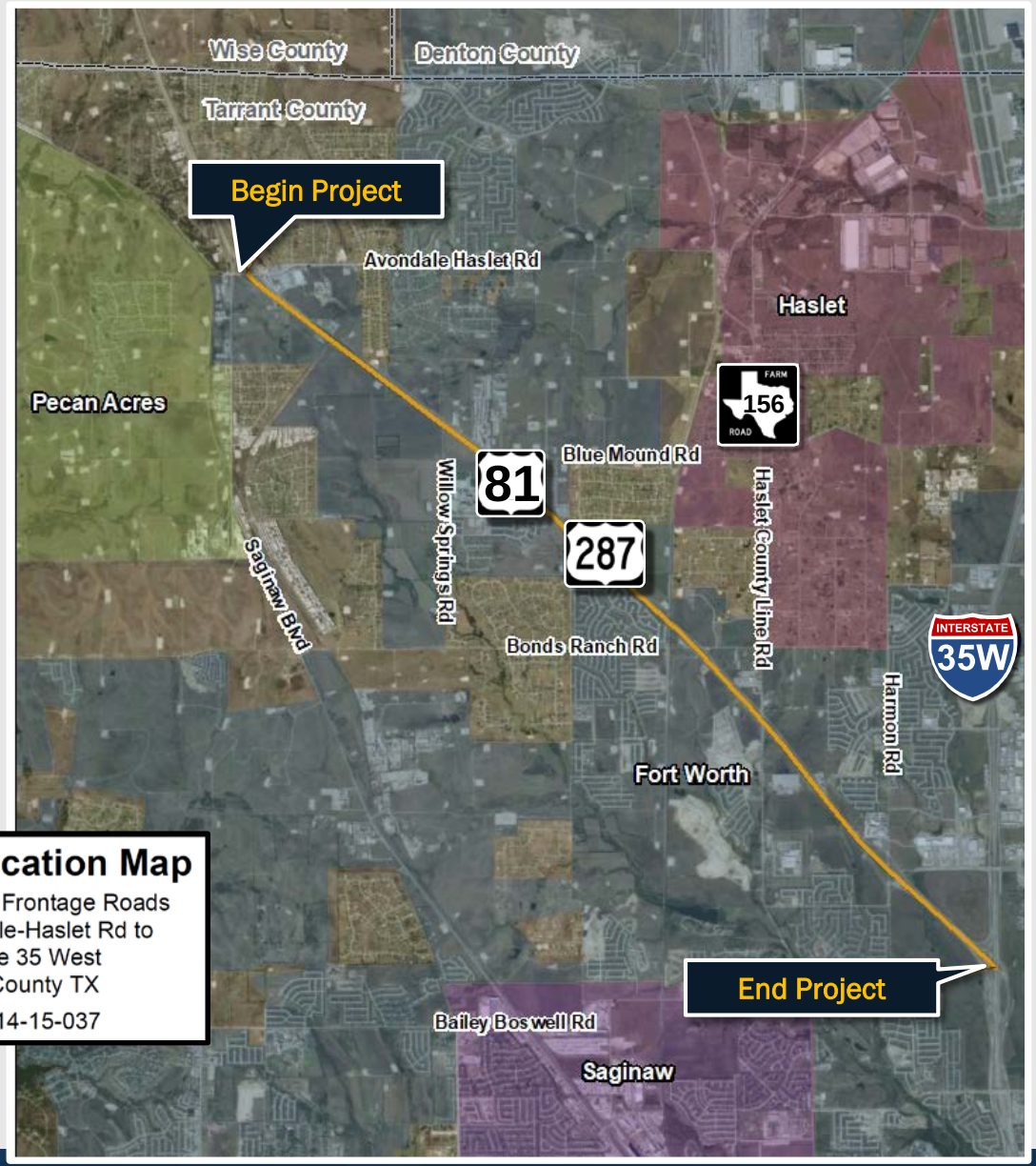
CSJ: 0014-15-037

Thursday, November 14, 2019

Presentation Topics

US 287 Project Location

US 81 / US 287
Project Limits



0 5,000 Feet

Project Location Map

US 81/ US 287 Frontage Roads
From Avondale-Haslet Rd to
Interstate 35 West
Tarrant County TX

CSJ: 0014-15-037

Project Purpose & Objectives

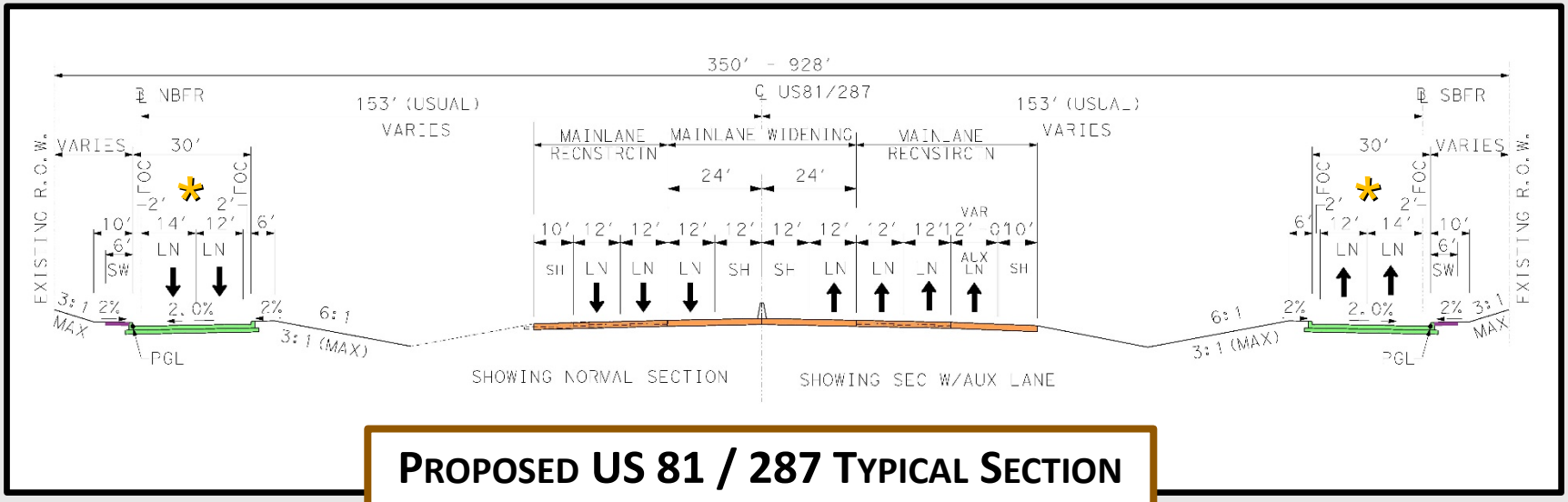
Purpose

- Improve mobility
- Enhance access
- Reduce congestion by designing for year 2040 projected traffic volumes
- Improve safety

Objectives

- Continuous one-way frontage roads
- Access ramp adjustments
- One additional US 81 / 287 travel lane in each direction
- Adjust main lane profiles for Willow Springs Road and Heritage Trace Parkway bridge insertions
- Intersection layout upgrades and U-turn installations
- Bike & pedestrian integration
- Increase bridge clearances

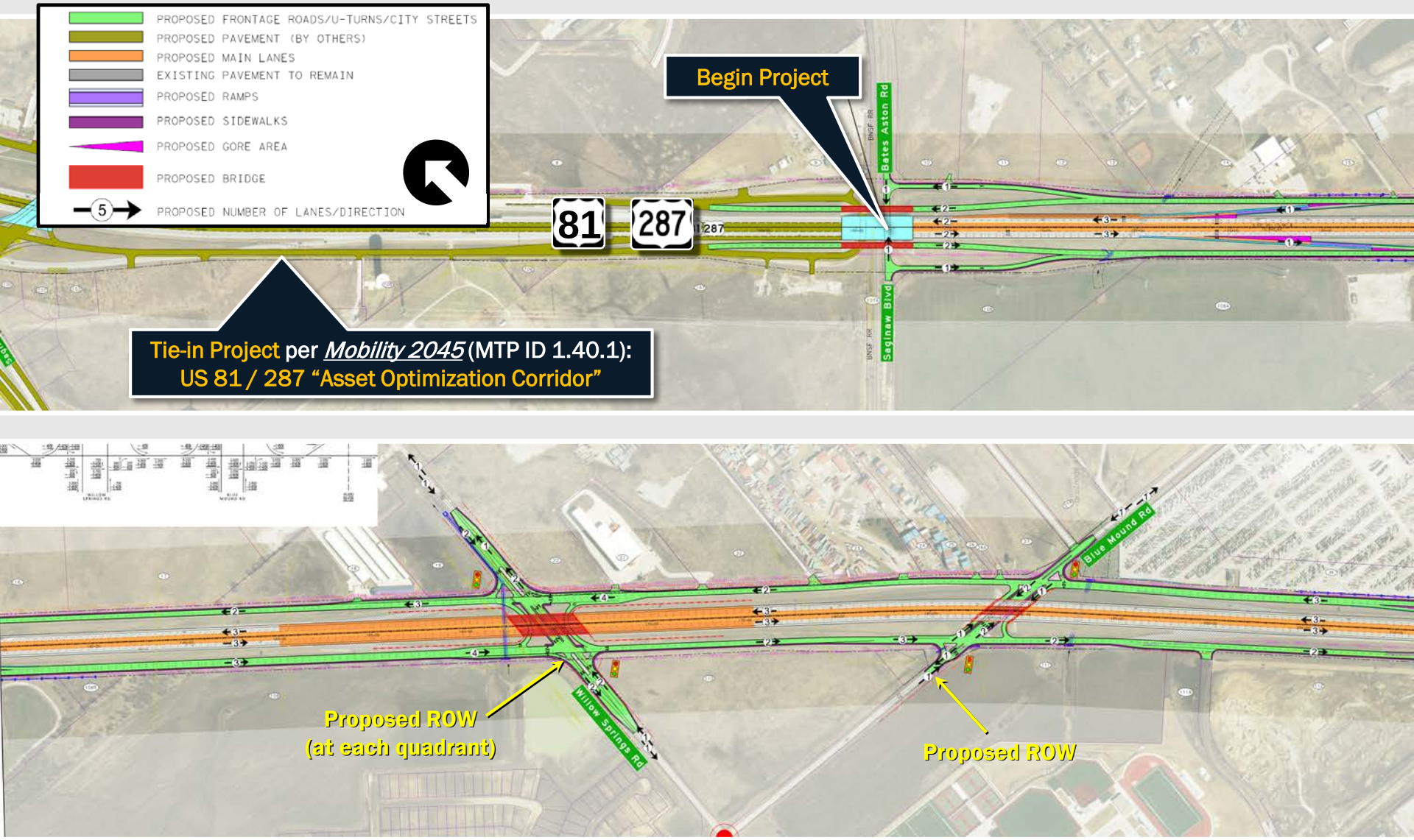
Recommended Design | Proposed Typical Section



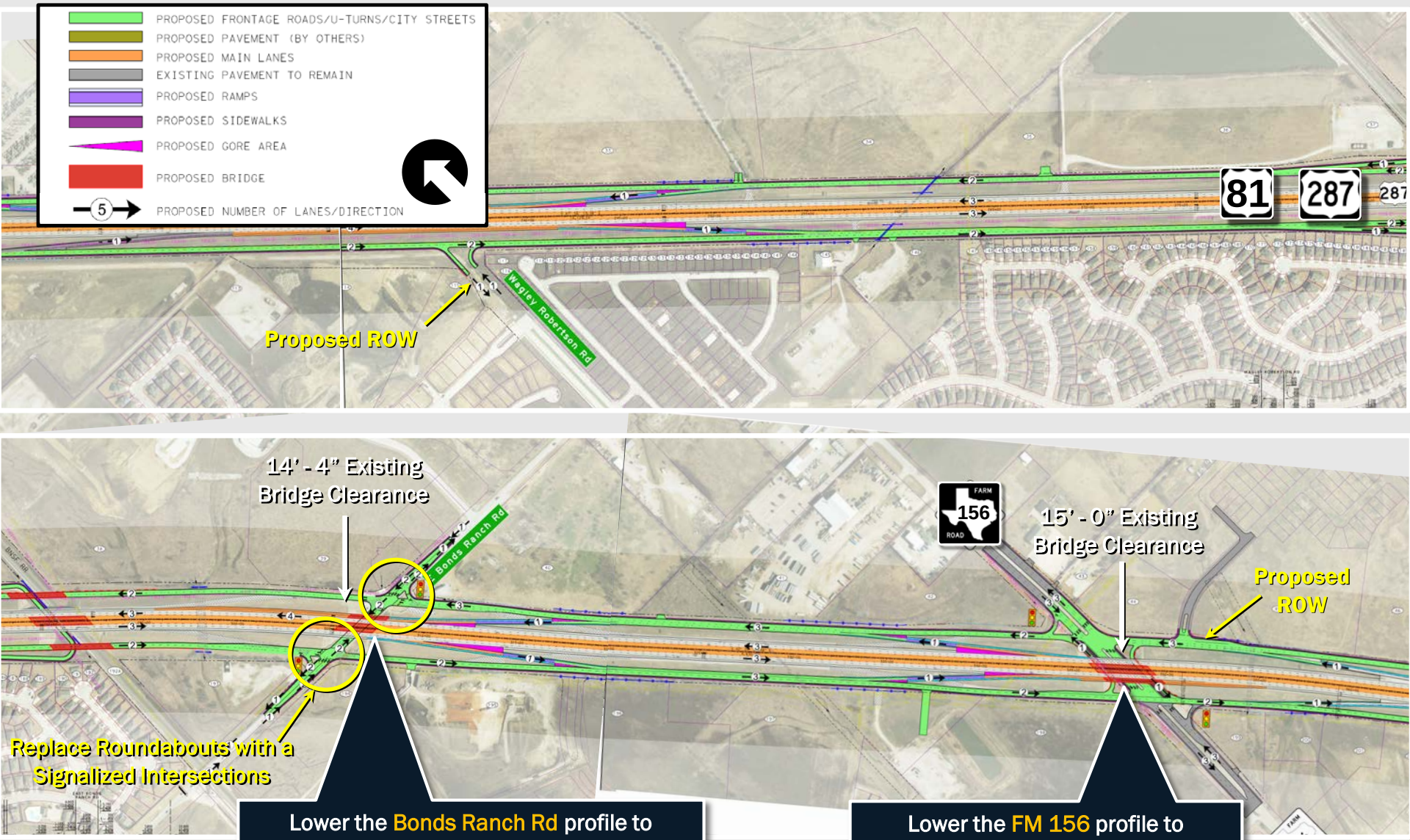
PROPOSED US 81 / 287 TYPICAL SECTION

* Bike accommodation to be determined (see Bicycle & Pedestrian Accommodation slide)

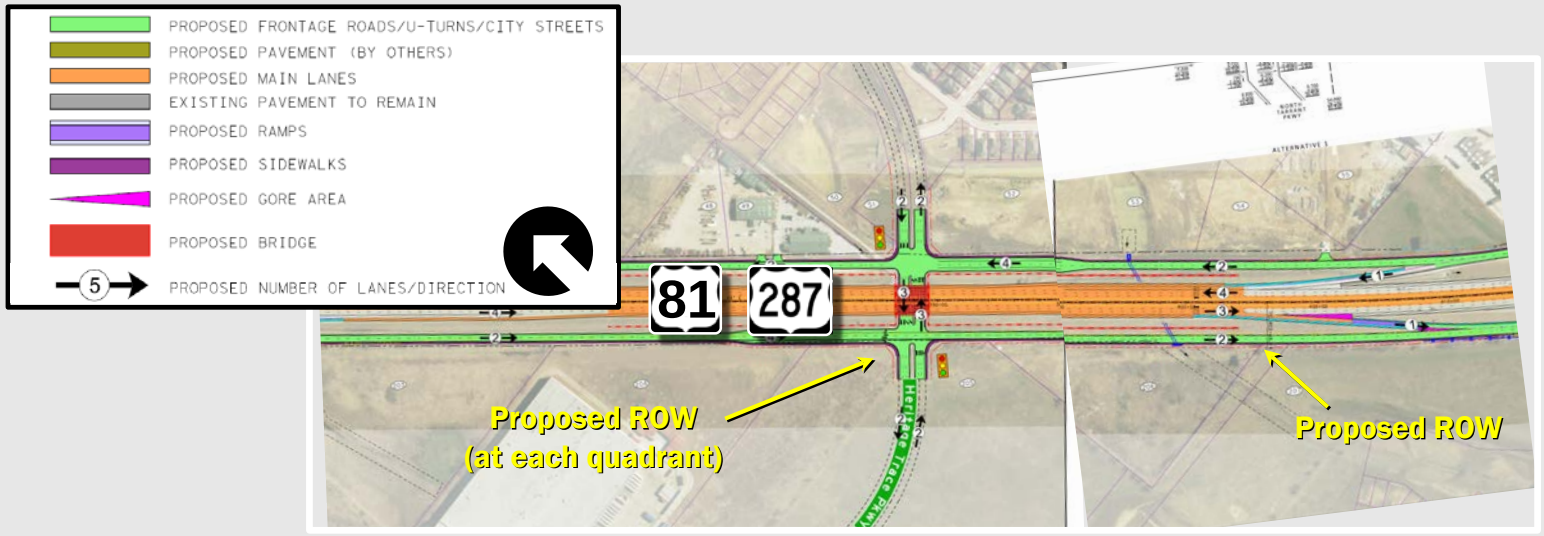
Recommended Design | Schematic Roll 1 of 3

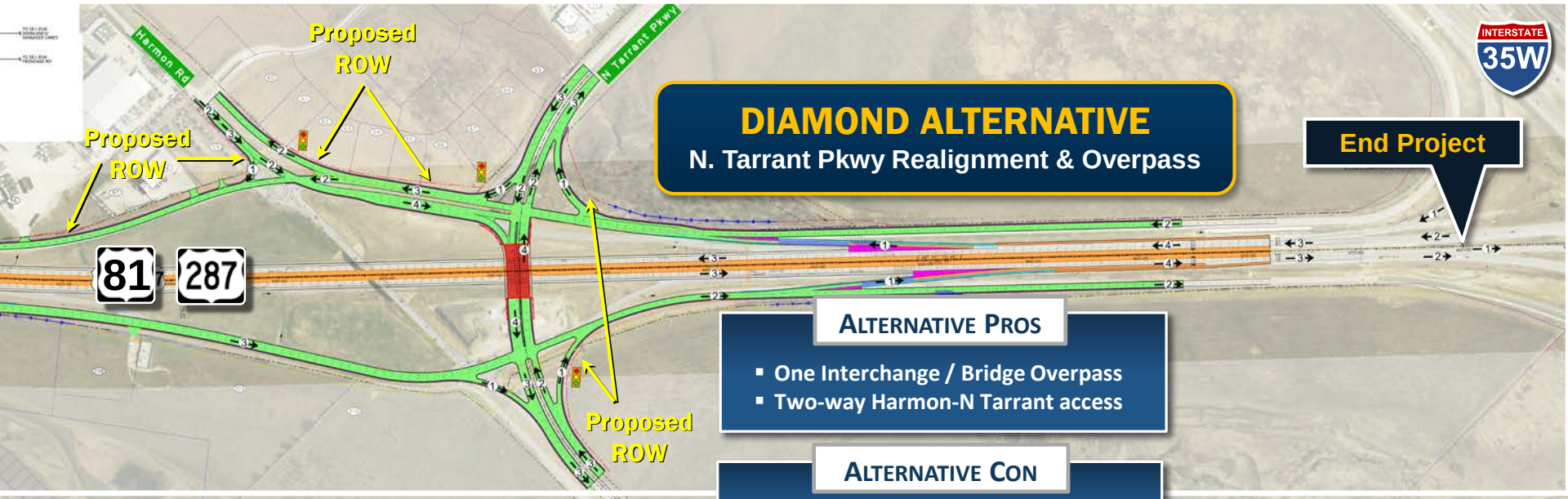


Recommended Design | Schematic Roll 2 of 3



Recommended Design | DIAMOND ALTERNATIVE





DIAMOND ALTERNATIVE

N. Tarrant Pkwy Realignment & Overpass

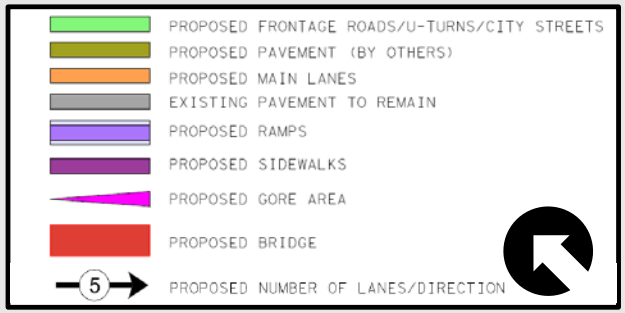
Alternative Pros

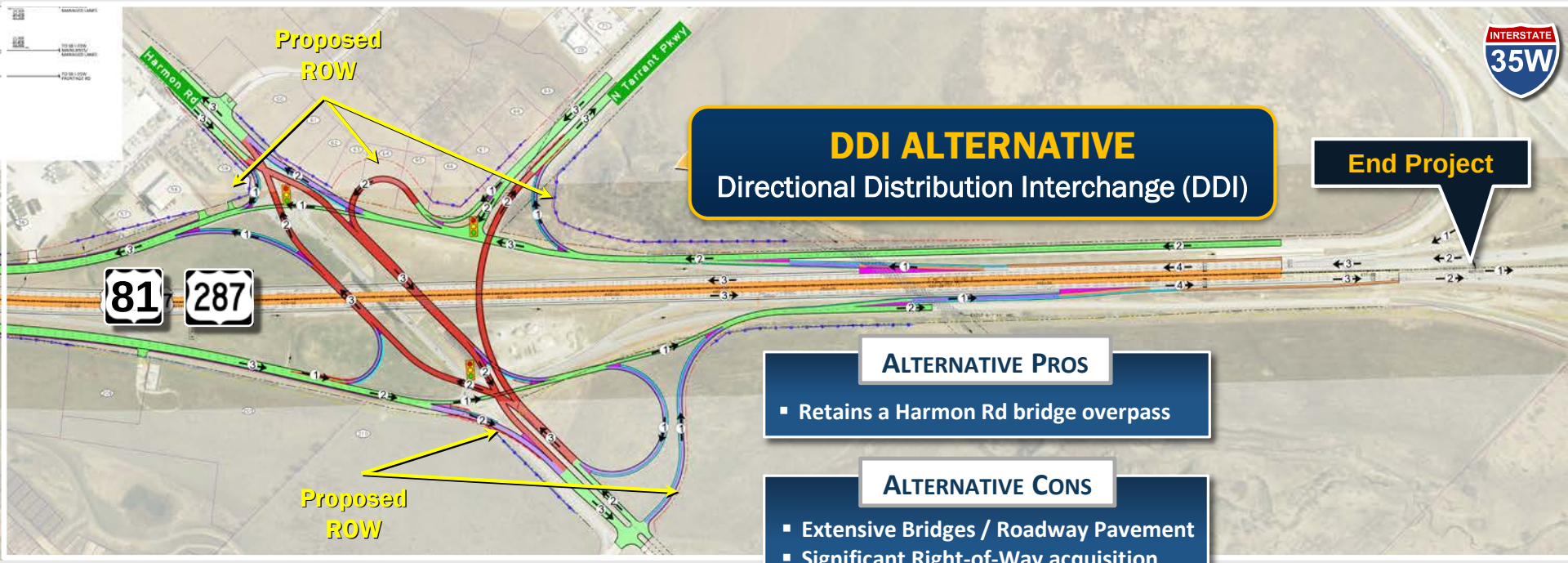
- One Interchange / Bridge Overpass
- Two-way Harmon-N Tarrant access

Alternative Con

- Harmon Rd routing / diversion

Recommended Design | DDI ALTERNATIVE





DDI ALTERNATIVE
Directional Distribution Interchange (DDI)

End Project

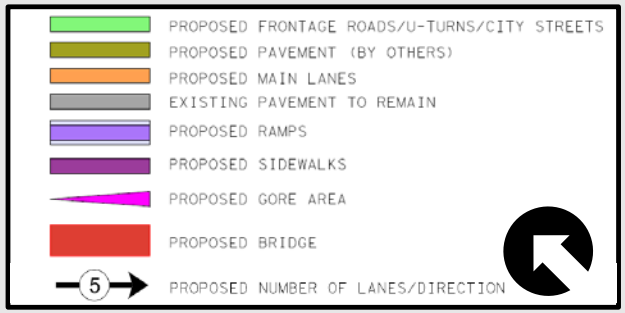
ALTERNATIVE PROS

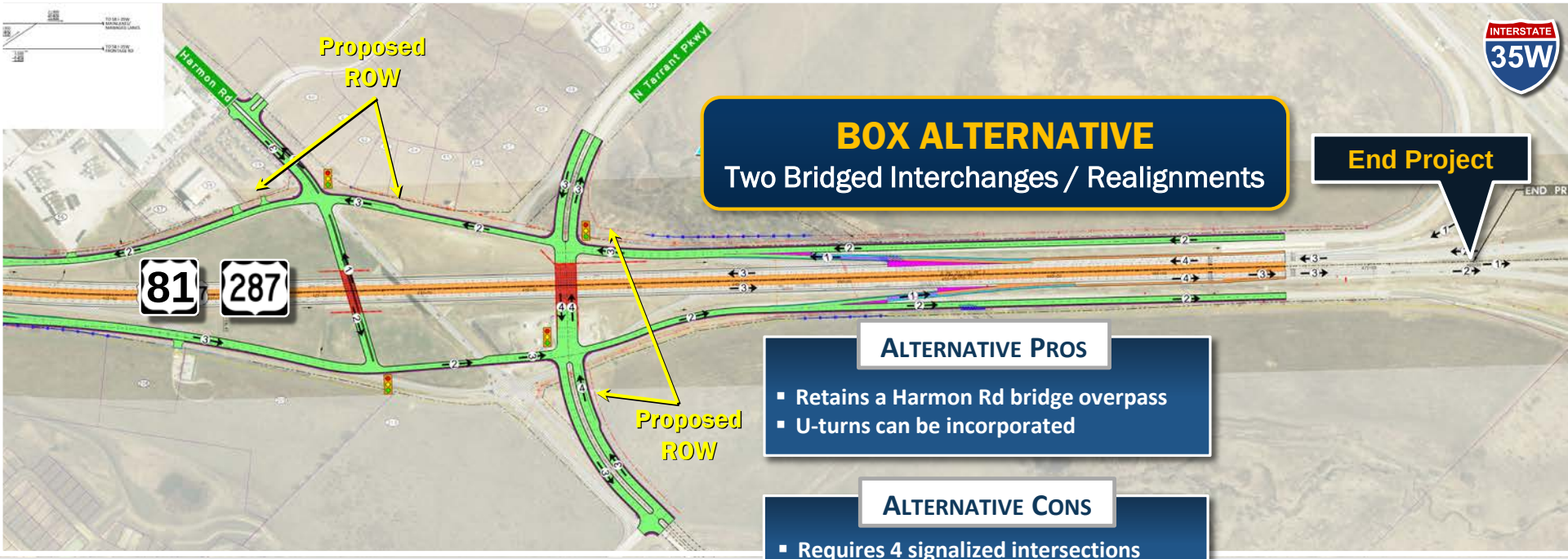
- Retains a Harmon Rd bridge overpass

ALTERNATIVE CONS

- Extensive Bridges / Roadway Pavement
- Significant Right-of-Way acquisition
- Driver Familiarity

Recommended Design | BOX ALTERNATIVE





BOX ALTERNATIVE
Two Bridged Interchanges / Realignments

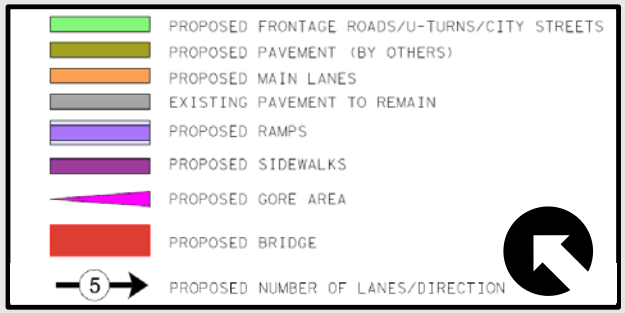
ALTERNATIVE PROS

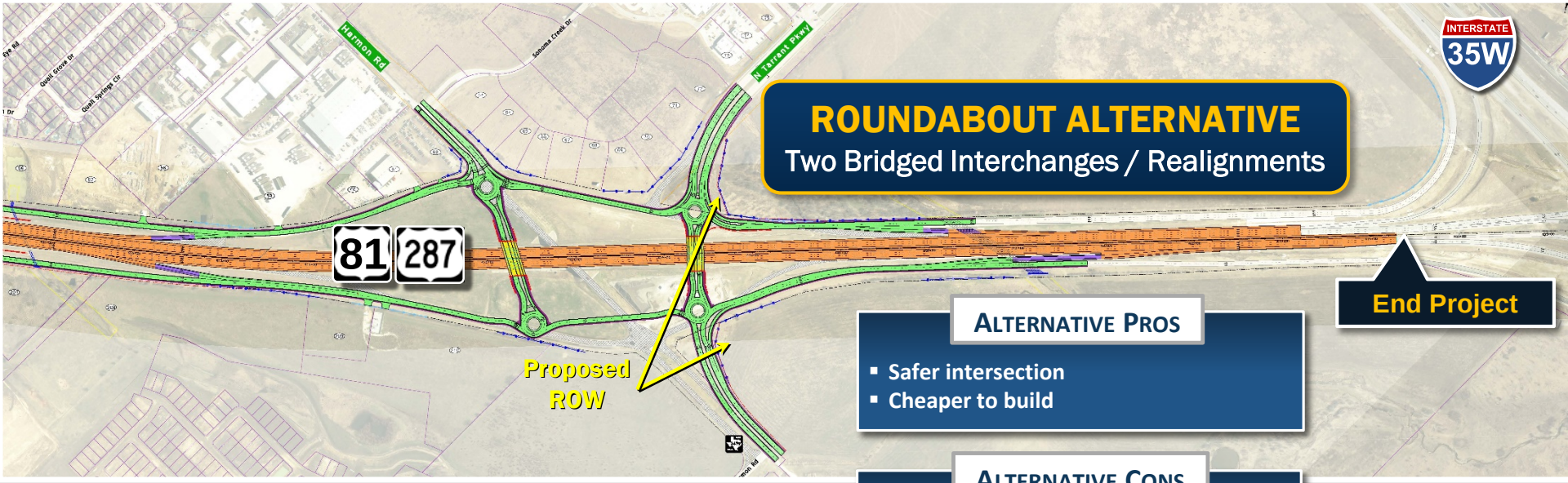
- Retains a Harmon Rd bridge overpass
- U-turns can be incorporated

ALTERNATIVE CONS

- Requires 4 signalized intersections

Recommended Design | ROUNDABOUT ALTERNATIVE





ROUNDABOUT ALTERNATIVE
Two Bridged Interchanges / Realignments

ALTERNATIVE PROS
- Safer intersection
- Cheaper to build

ALTERNATIVE CONS
- Capacities

Bicycle & Pedestrian Accommodation

The TxDOT Design Division and the FHWA are opting away from bike / vehicle **Shared Use Lanes** on TxDOT projects and encouraging the following alternatives, pending the establishment of conclusive **FHWA design guidelines**:

5-6 Lane Roadway (Buffered Bike Lane Option)

Bicyclists: The 6-foot bike lane with a 3-foot buffer improves motorist awareness of bicyclists operating in the lanes.
Motorists: Motorists can easily overtake cyclists on the roadway and have decreased stress operating around bicyclists.
Pedestrians: Comfort and safety remains unchanged.
Transit Operators and Riders: Buses can stop within the shoulder, which can create conflicts with bicyclists.

5-6 Lane Roadway (Separated Bike Lane Option)

Bicyclists: The shoulders and travel lanes can be reduced in width to create a bi-directional separated bike lane.
Motorists: Motorists can easily overtake cyclists on the roadway and have decreased stress operating around bicyclists.
Pedestrians: Comfort and safety remains unchanged.
Transit Operators and Riders: Buses will be required to stop within the travel lane. At transit stops, it will be required that waiting pedestrians are not standing on the shared use path.

5-6 Lane Roadway (Shared Use Path Option)

Related Resources

1. **FHWA Workbook on Incorporating On-Road Bicycle Networks into Resurfacing Projects**
2. **FHWA Proven Safety Countermeasures**
3. **Transportation Research Board (TRB) Highway Capacity Manual**
4. **USDOT Memorandum on Level of Service**
5. **ITE Trip Generation Manual**

Bicyclists: The existing sidewalk can be widened to create a shared use path. Pedestrian use will likely result in some cyclists to operate in the roadway.
Motorists: Minimal impact on motorist safety given the slower speed nature of the roadway.
Pedestrians: The path creates a comfortable and safe place for people to walk continuously on one side of the roadway.
Transit Operators and Riders: Buses will be required to stop within the travel lane. At transit stops, it will be required to make sure waiting pedestrians are not standing on the shared use path. Rider access is improved with safer street crossings.

Source: FHWA, Bikeway Selection Guide, Feb., 2019

Estimated Project Costs* & Funding Status

- Estimated construction cost range (final cost depends on alternative):
- W/Alternative DIAMOND, $197M
- W/Alternative DDI, $227M
- W/Alternative BOX, $198M
- W/Alternative ROUNDABOUT, $174M
- Current Funding Status:
  - 2019-2022 Statewide Transportation Improvement Program (STIP) 2022 TIP Year.
  - Construction estimate: $142 million.
  - Preliminary engineering estimate: $6.9 million.
  - Construction is not fully funded. TxDOT will continue to work with NCTCOG and regional partners to secure full funding.

***Subject to Change**

Anticipated Schedule*

Timeline	Activity
November 2019	Open House Public Meeting
End of 2019	60% Complete Design Schematic submitted to TxDOT Design Division
Spring 2020	Value Engineering Study
Fall 2020	Public Hearing
End of 2020	Noise Workshop (addressing noise mitigation with adjacent owners)
End of 2020	Environmental Approval

***Subject to Change**

Questions or Comments

- Study Team Representatives are available to interpret exhibits and answer questions.

- To submit comments or questions as part of the Official Record of today's meeting, please fill out a Comment Card and submit by November 29, 2019.

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Thank You!

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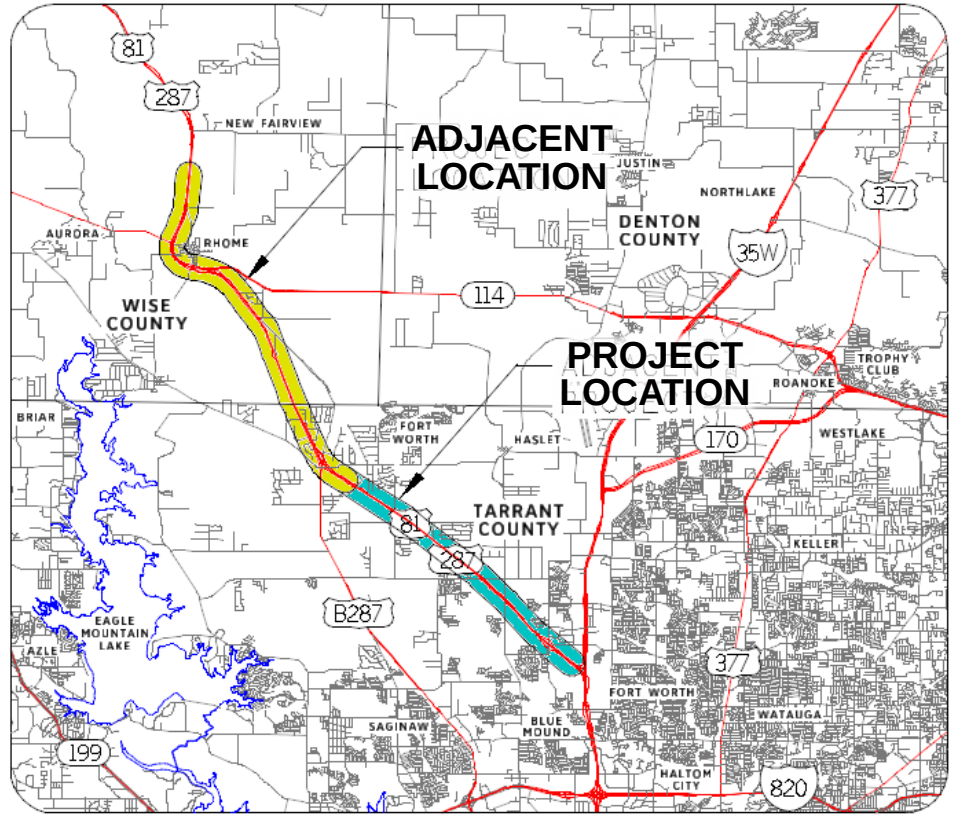
Adjacent TxDOT Projects

US 81/US 287 from Rhome to Avondale

- Adjacent TxDOT project to the north
- Proposed Improvements:
  - Add one mainlane in each direction
  - New interchanges with proposed roadways
  - Add frontage roads and convert to continuous system of one-way frontage roads
- Project is in schematic development



US 81 / US 287 Frontage Roads: Rhome to Avondale

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