Open House

State Highway 19 Improvements

(Beginning 5 Miles East of US-81, Extending East 8.35 Miles to the Roaring Creek Bridge, Grady County)

June 29, 2017

State Highway 19 Improvements

Open House Purpose

- Purpose and need for SH-19 improvements
- 3 alternatives considered for each segment
- Preferred Alternative
- Feedback and public input

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Existing Facility

- Two-lane facility with 12-ft. driving lanes
- 1-ft. shoulder widths
- Inadequate vertical alignment
- Annual average daily traffic
  - Current (2017) =2,600 vehicles per day
  - Projected (2037) = 3,600 vehicles per day

State Highway 19 Improvements

Purpose and Need

- Improve safety
  - 96 collisions recorded from 2006 through 2016
  - Collision rate for western half of the project is 1.5 times the statewide rate for similar facilities

- Provide a facility which meets current design standards
  - Correct sight distance due to substandard vertical alignment
  - Provide adequate shoulders and clear zone

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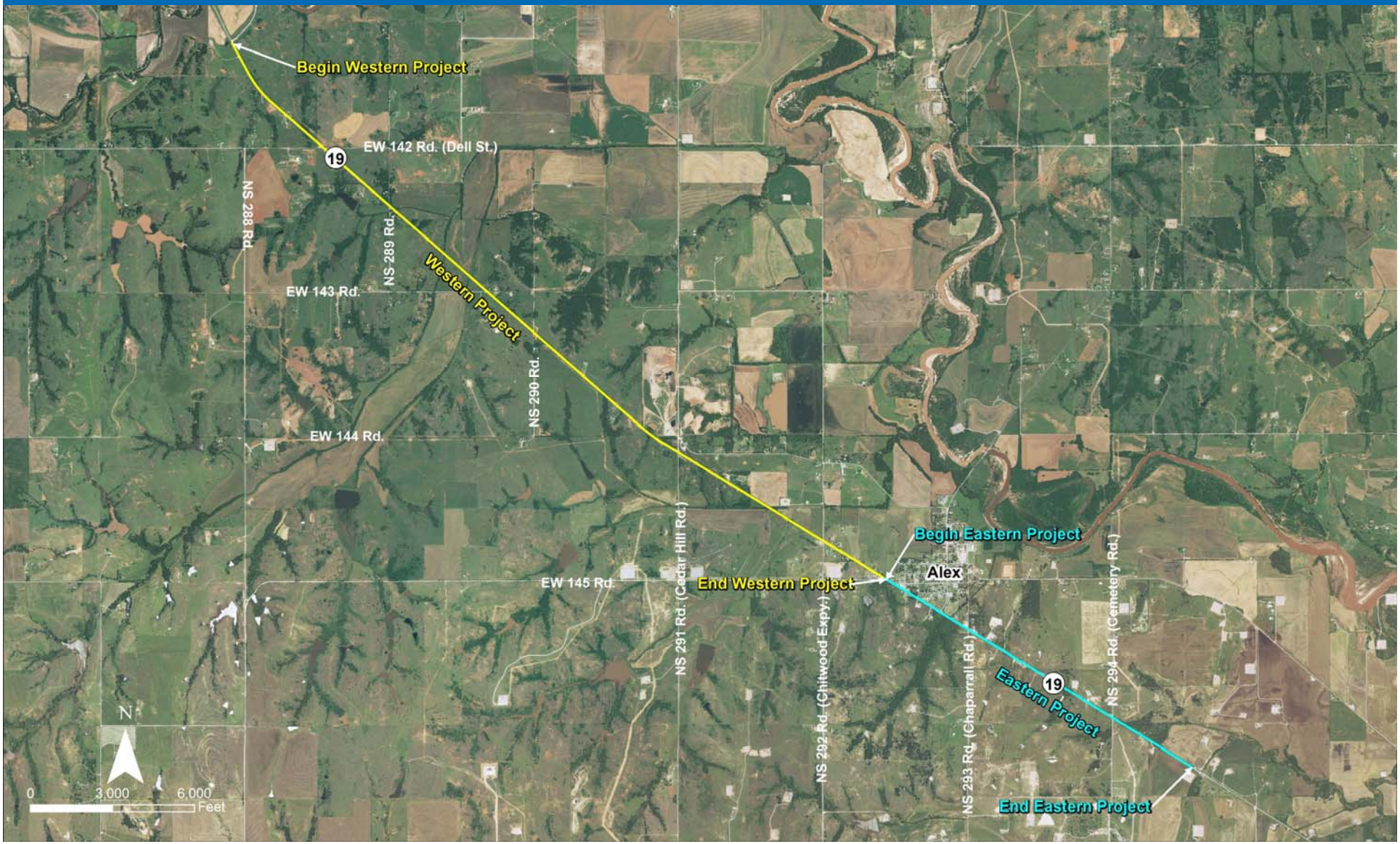
Project Extents



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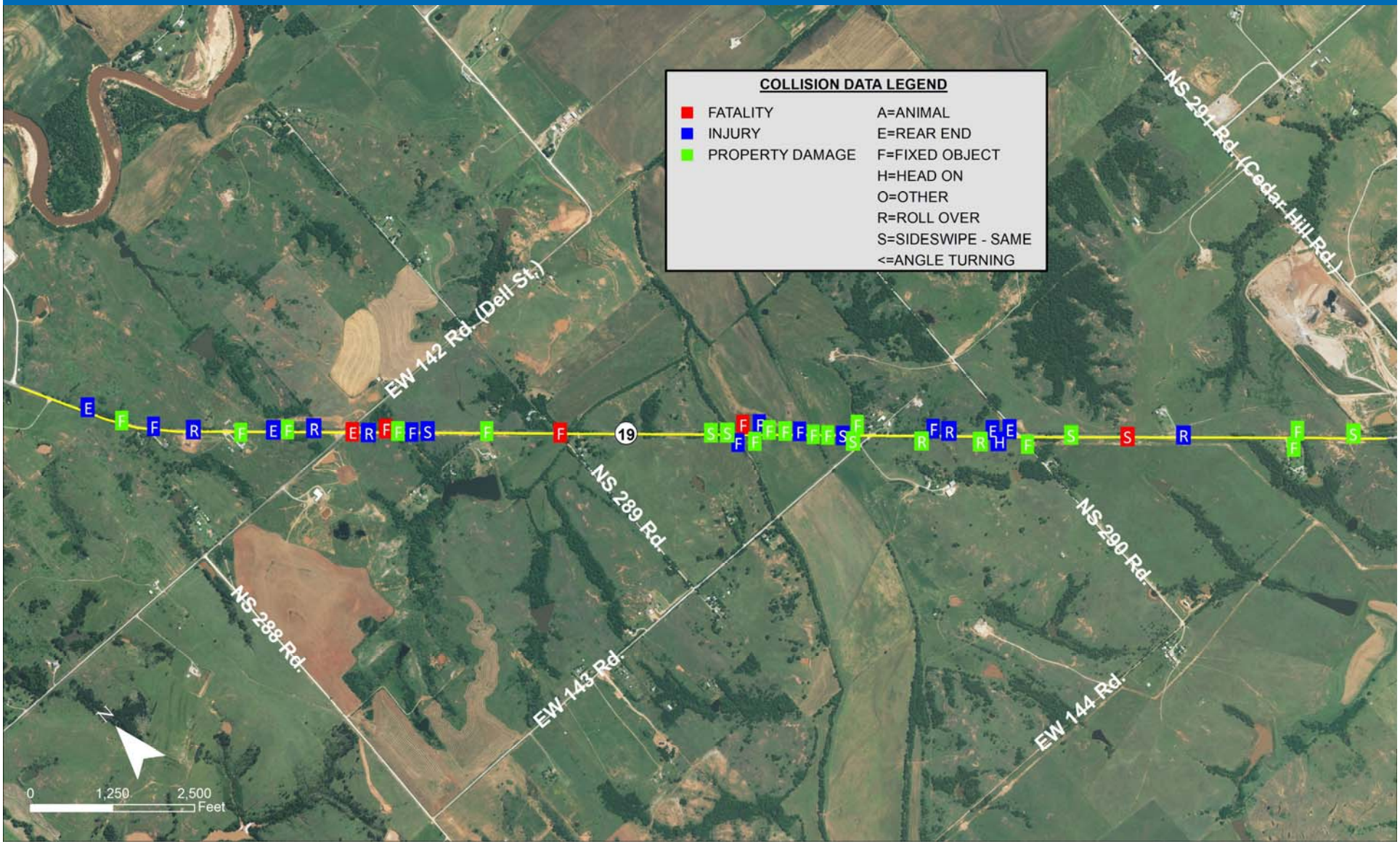
Collisions, 2006 – 2016, West Half



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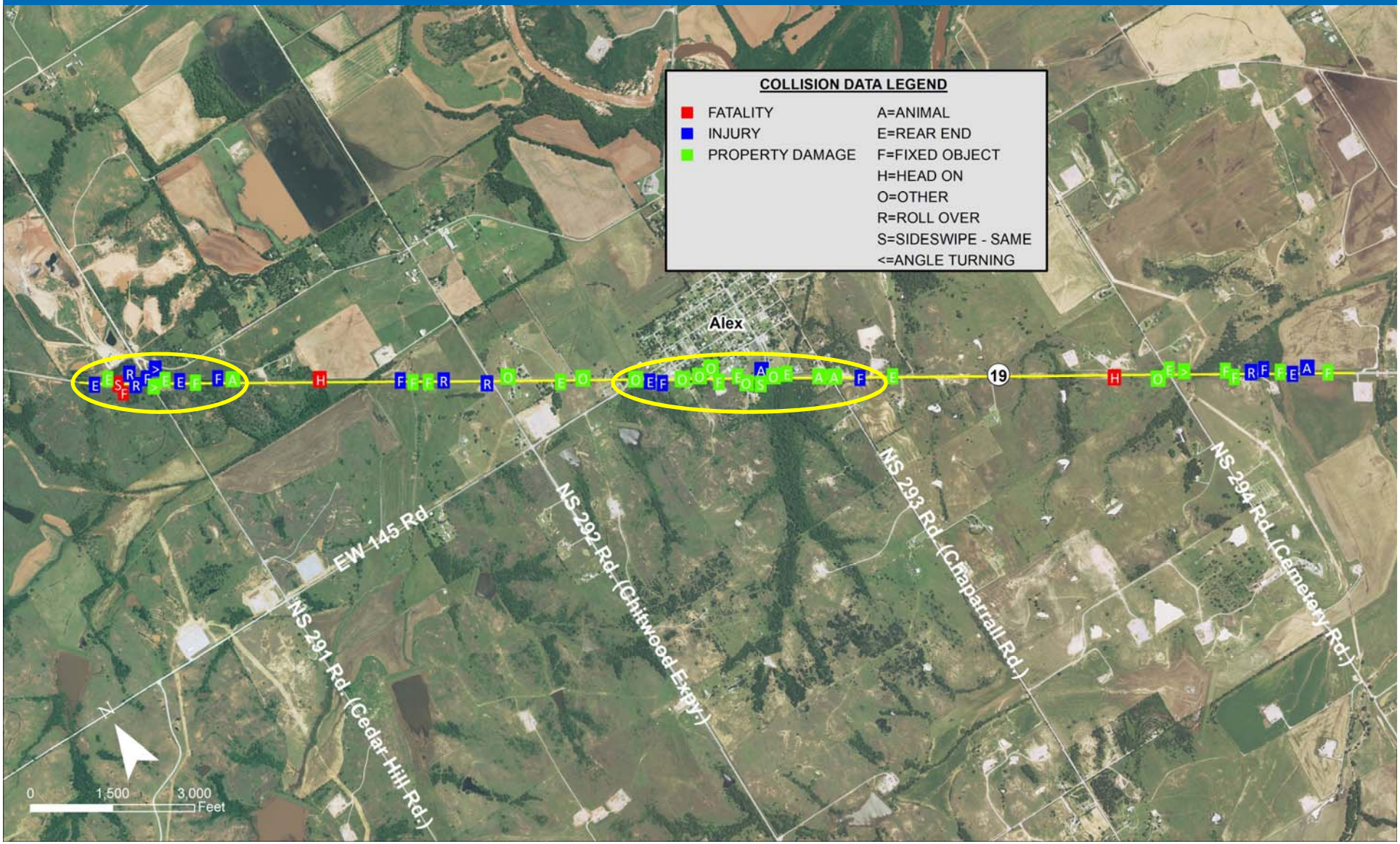
Collisions, 2006 – 2016, East Half



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Proposed Project

- SH-19 divided into 3 segments for study purposes:
  - Segment A: from 5 miles east of US-81 to Alex
  - Segment B: through Alex
  - Segment C: from Alex to Roaring Creek Bridge

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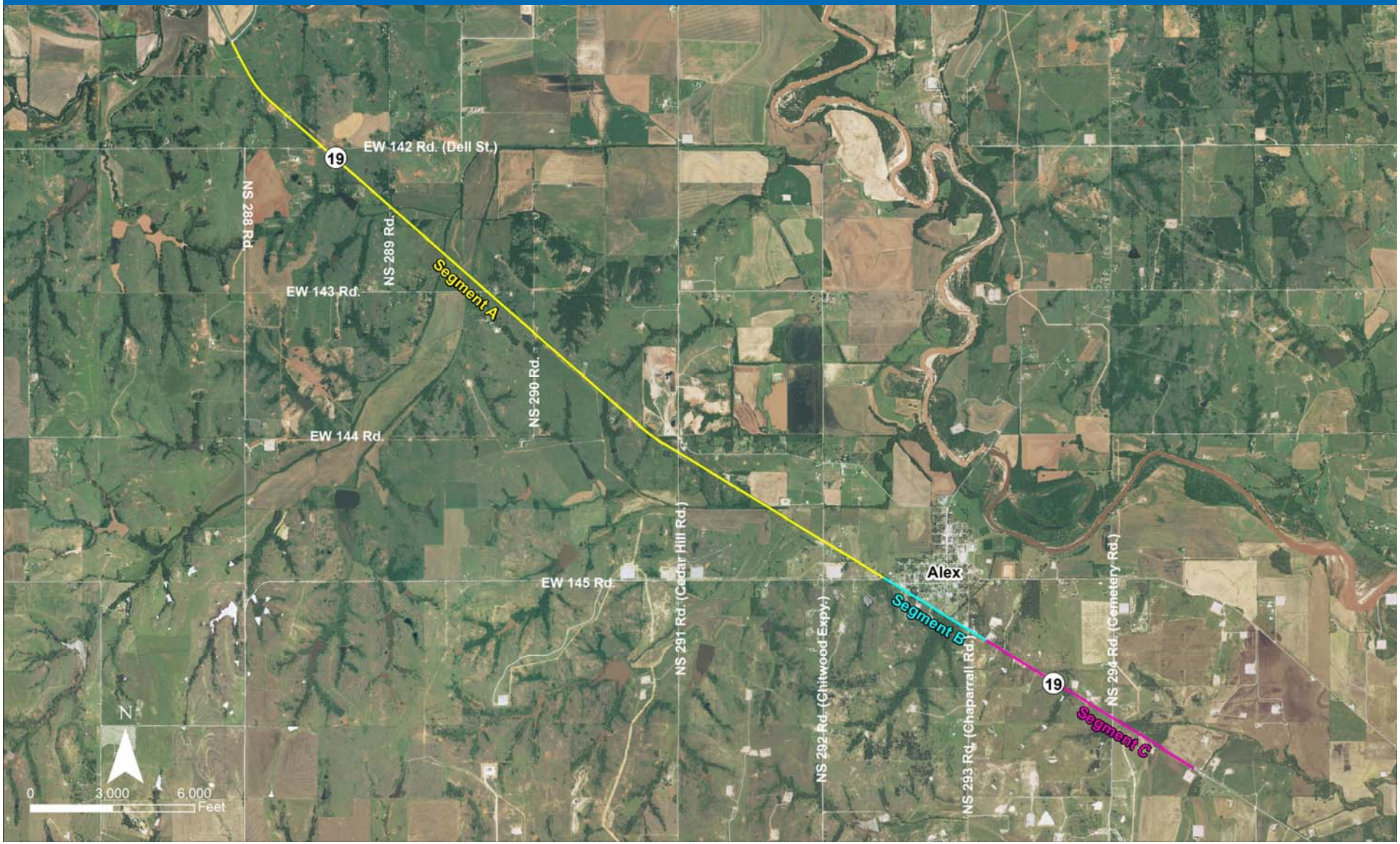
Study Segments



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Proposed Project

- Correct the vertical alignment
- Add shoulders
- Establish clear zone
- Add turn lanes to Cedar Hills Road intersection (Landfill) and through Alex

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Proposed Project – Typical Section

Proposed Improvements

- Two 12-Ft. Lanes
- 8-Ft. Paved Shoulders
- 8-Ft. Wide Ditches
- 1:3 Backslopes
- 1:6 Foreslopes
- Establish Adequate Clear Zone (~28-Ft.)

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Segment A, Alternatives Considered

Segment A – West of Alex

- Alternative 1: Improvements on Existing Alignment
- Alternative 2: North Offset
- Alternative 3: South Offset

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Segment B, Alternatives Considered

Segment B – Thru Alex

- Alternative 1: Curb and Gutter
  (widen about centerline)
- Alternative 2*: Open Section with 4-ft. Shoulders
  (widen to south)
- Alternative 3*: Open Section with 8-ft. Shoulders
  (widen to south)

** No widening to north considered, due to area development*

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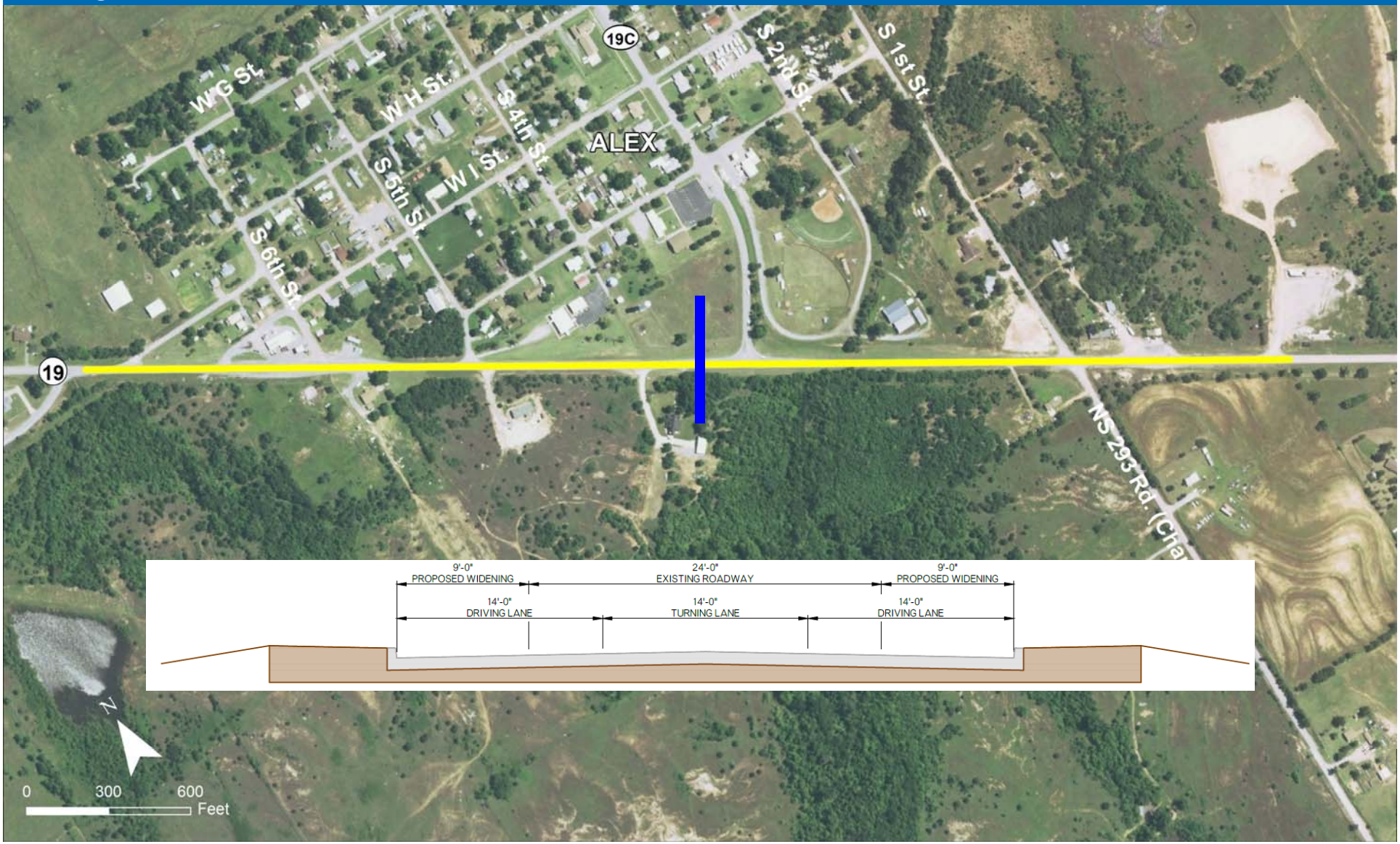
Segment B, Alternative 1: Curb and Gutter



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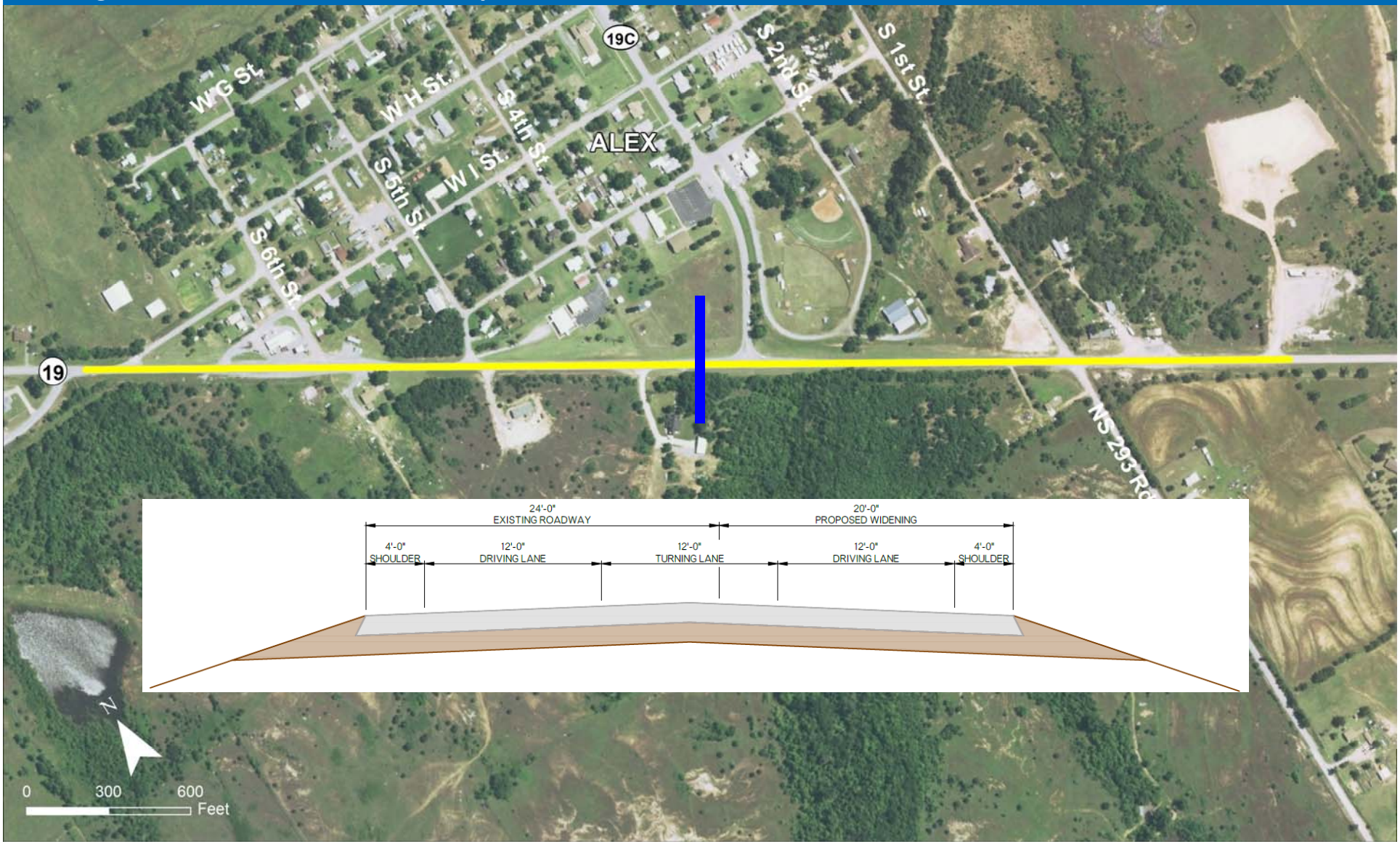
Segment B, Alternative 2: Open Section with 4' Shoulders



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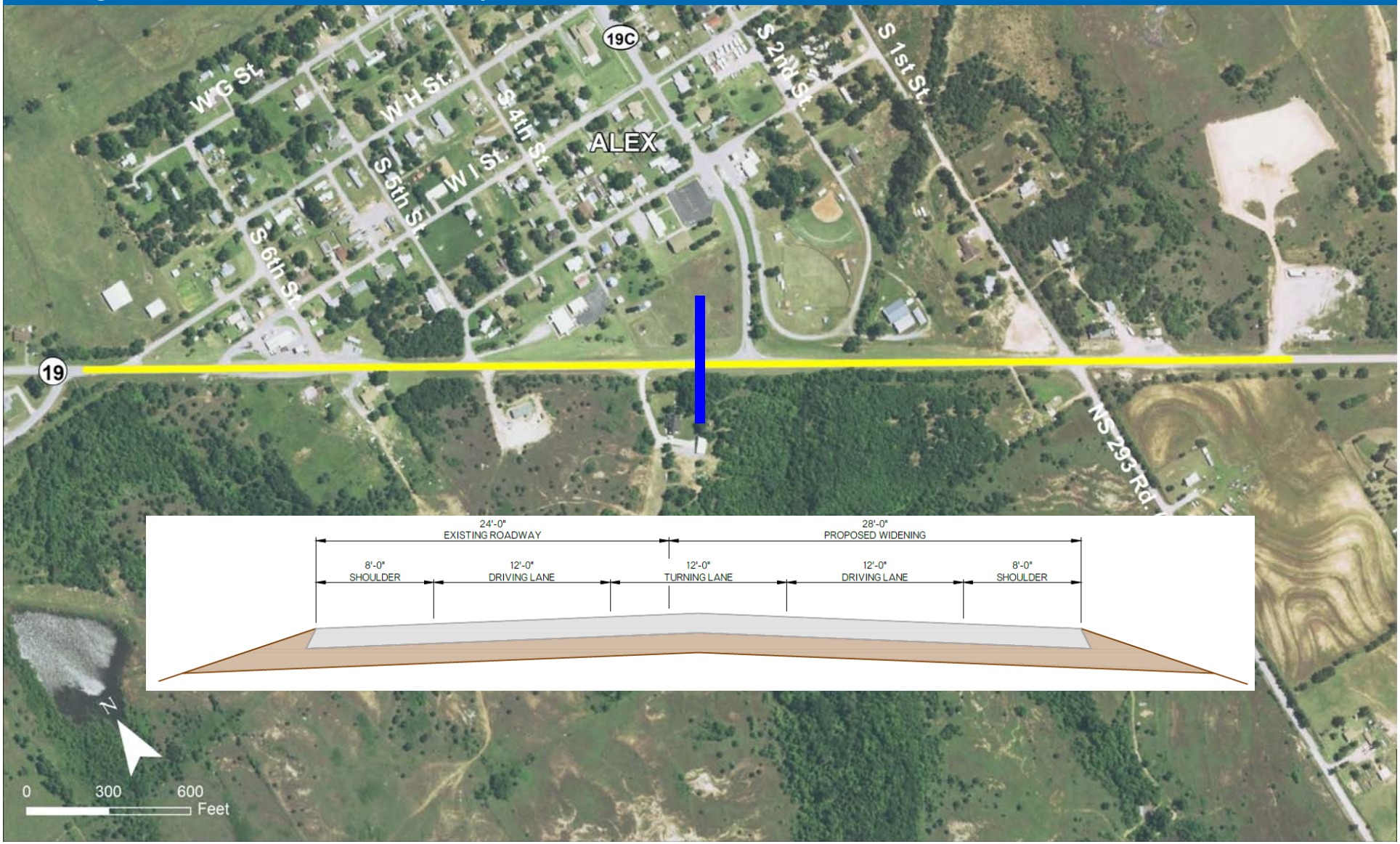
Segment B, Alternative 3: Open Section with 8' Shoulders



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Segment C, Alternatives Considered

Segment C – East of Alex

- Alternative 1: Improvements on Existing Alignment
- Alternative 2: North Offset
- Alternative 3: South Offset

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Constraints Mapping

Reconnaissance performed to identify constraints

- Wetlands and waters
- Threatened & endangered species critical habitat
- Archeological sites and historic properties
- Aboveground or underground storage tanks
- Oil/gas wells
- Residences
- Commercial facilities
- Utilities

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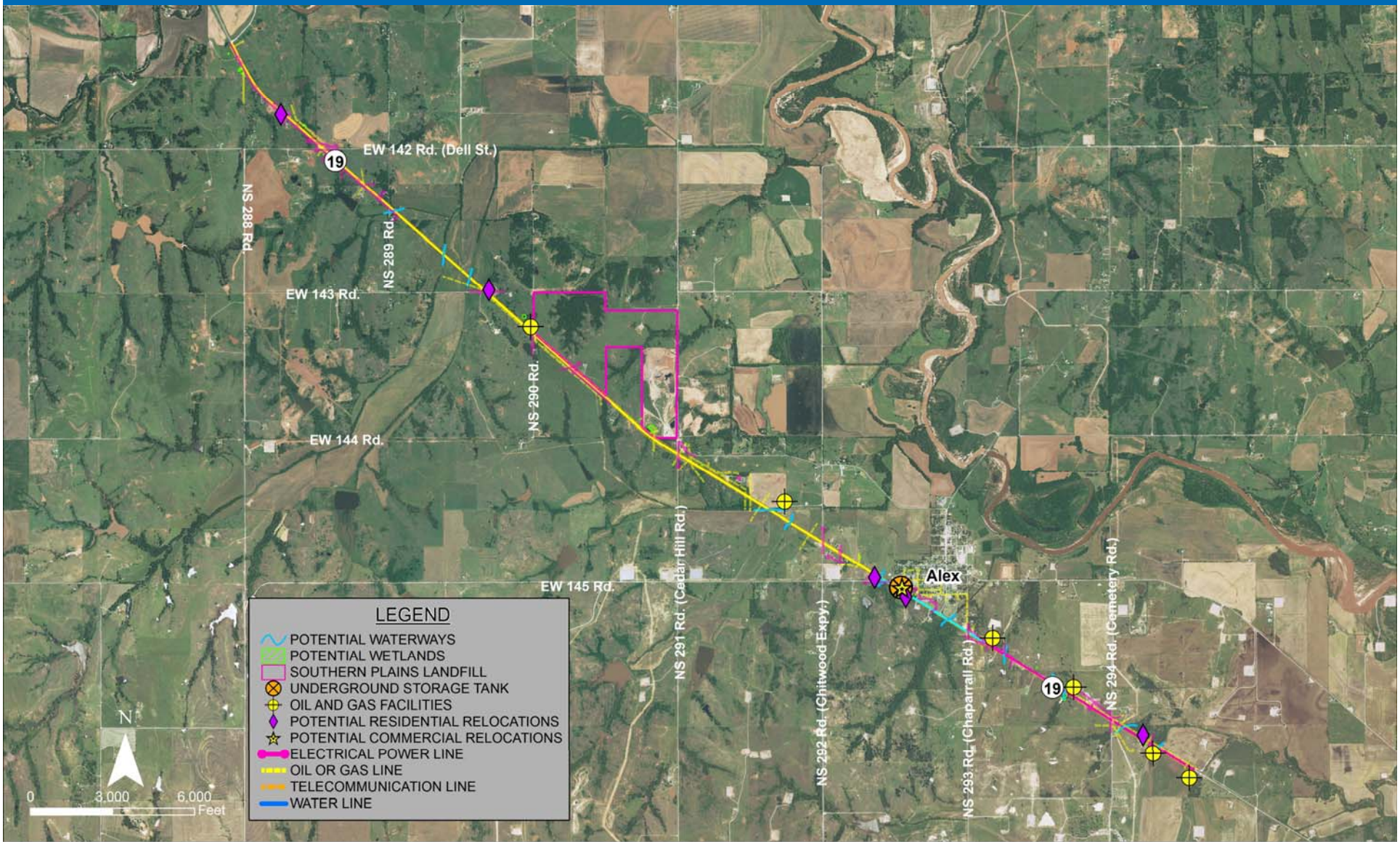
Composite Constraints Map



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Segment A: Comparison of Alternatives

Segment A: Comparison of Alternatives

Comparison Parameters*	Existing Alignment	North Offset	South Offset
Geometric Design			
Vertical Alignment	50 mph	65 mph	65 mph
Environmental Impacts			
Wetlands Impacts (ac.)	0	0.55	0.48
Utility Relocation			
Utilities Relocation Impacts	Low	Medium	High
Right-of-Way Acquisition			
Potential Residential Relocations	0	1	2
Potential Commercial Properties Impacted	3	3	3
Southern Plains Landfill (ac.)	3.33	10.11	0.63
Total Project Cost**			
Estimated Construction Costs	$23,008,800	$29,140,800	$28,560,000
Estimated Utility Costs	$1,536,500	$2,000,600	$4,477,600
Estimated Right-of-Way Costs	$880,900	$2,022,600	$1,285,800
Estimated Total Costs	$25,425,900	$33,163,400	$34,323,400

***:** *All other parameters same for all alternatives.*

****:** *Does not include wetlands/waters mitigation costs.*

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Segment A: Preferred Alternative Selection

Alternative 1 – Improvements on Existing Alignment

- Minimal improvements
- Lower geometric standard (lower design speed)

Alternative 2 – North Offset

- Good improvements
- Lower offset alignment cost

Alternative 3 – South Offset

- Good improvements
- Most potential residential relocations
- Highest cost

Segment A Preferred Alternative: Alt. 2, North Offset

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Segment B: Comparison of Alternatives

Segment B: Comparison of Alternatives

Comparison Parameters*	Curb and Gutter	Open Section, 4' Shoulders	Open Section, 8' Shoulders
Geometric Design			
Speed Limit	45 mph	50 mph	50 mph
Environmental Impacts			
Wetlands Impacts (ac.)	0	0	0
Utility Relocation			
Utilities Relocation Impacts	Medium	Low	High
Right-of-Way Acquisition			
Potential Residential Relocations	1	1	1
Potential Commercial Properties Impacted	0	0	0
Total Project Cost**			
Estimated Construction Costs	$2,167,400	$2,088,200	$2,456,600
Estimated Utility Costs	$45,100	$40,600	$57,200
Estimated Right-of-Way Costs	$294,000	$297,400	$298,800
Estimated Total Costs	$2,506,500	$2,426,200	$2,812,600

***:** *All other parameters same for all alternatives.*

****:** *Does not include wetlands/waters mitigation costs.*

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Segment B: Preferred Alternative Selection

Alternative 1 – Curb and Gutter

- Drainage issues (flooding outside lanes)
- Safety concerns (proximity of curbs thru traffic)

Alternative 2 – Open Section, 4’ Shoulders

- Lower Cost

Alternative 3 – Open Section, 8’ Shoulders

- Higher Cost

Segment B Preferred Alternative: Alt. 2, Open Section, 4-ft. Shldrs

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Segment C: Comparison of Alternatives

Segment C: Comparison of Alternatives

Comparison Parameters*	Existing Alignment	North Offset	South Offset
Geometric Design			
Vertical Alignment	55 mph	65 mph	65 mph
Environmental Impacts (Approximate)			
Wetlands Impacts (ac.)	0.19	0.04	0.27
Utility Relocation			
Utilities Relocation Impacts	Low	High	Medium
Right-of-Way Impacts			
Potential Residential Relocations	1	1	1
Potential Commercial Properties Impacted	2	2	2
Total Project Cost**			
Estimated Construction Costs	$5,203,100	$6,304,700	$6,395,900
Estimated Utility Costs	$285,100	$1,151,00	$727,700
Estimated Right-of-Way Costs	$395,600	$191,200	$396,400
Estimated Total Costs	$5,883,800	$7,646,900	$7,520,000

***:** *All other parameters same for all alternatives.*

****:** *Does not include wetlands/waters mitigation costs.*

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Segment C: Preferred Alternative Selection

Alternative 1 – Improvements on Existing Alignment

- Moderate geometric improvements
- Lowest cost

Alternative 2 – North Offset

- Utility conflict
- Highest cost

Alternative 3 – South Offset

- High cost

Segment C Preferred Alternative:

Alt. 1, Improvements on Existing Alignment

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Preferred Alternative

Segment A: North Offset

Segment B: Open Section, 4-Ft. Shoulders

Segment C: Improvements on Existing Alignment

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What Happens Next?

- Consider comments from Open House
- Finalize design report
- Complete environmental studies and design plans

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Roadway Improvement Process

- Acquire right-of-way (year 2020)
- Relocate utilities (year 2020)
- Begin construction (year 2022 / 2023)

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Submit Your Comments

- Leave your written comments with us tonight.
- Download and submit a comment form at:
  www.odot.org/publicmeetings
- Submit your written comments by mail to:
  Oklahoma Department of Transportation
  Environmental Programs Division
  200 N. E. 21st Street
  Oklahoma City, OK 73105
- Fax your written comments to:
  (405) 522-5193
- Email your comments to:
  environment@odot.org
- **Please submit your comments by July 14, 2017.**

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