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
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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
• 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
• 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
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
Segment C – East of Alex

• Alternative 1: Improvements on Existing Alignment

• Alternative 2: North Offset

• Alternative 3: South Offset
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
State Highway 19 Improvements
Composite Constraints Map
### Segment A: Comparison of Alternatives

<table>
<thead>
<tr>
<th>Comparison Parameters*</th>
<th>Existing Alignment</th>
<th>North Offset</th>
<th>South Offset</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Geometric Design</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vertical Alignment</td>
<td>50 mph</td>
<td>65 mph</td>
<td>65 mph</td>
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<tr>
<td><strong>Environmental Impacts</strong></td>
<td></td>
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<tr>
<td>Wetlands Impacts (ac.)</td>
<td>0.47</td>
<td>0.55</td>
<td>0.48</td>
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<tr>
<td><strong>Utility Relocation</strong></td>
<td></td>
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</tr>
<tr>
<td>Utilities Relocation Impacts</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td><strong>Right-of-Way Acquisition</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Potential Residential Relocations</td>
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<td>2</td>
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<tr>
<td>Potential Commercial Properties Impacted</td>
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<tr>
<td>Southern Plains Landfill (ac.)</td>
<td>3.33</td>
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<tr>
<td><strong>Total Project Cost</strong></td>
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<tr>
<td>Estimated Construction Costs</td>
<td>$23,008,800</td>
<td>$29,140,800</td>
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<tr>
<td>Estimated Utility Costs</td>
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<td>$33,163,400</td>
<td>$34,323,400</td>
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</table>

* All other parameters same for all alternatives.

** Does not include wetlands/waters mitigation costs.
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
### Segment B: Comparison of Alternatives

<table>
<thead>
<tr>
<th>Comparison Parameters*</th>
<th>Curb and Gutter</th>
<th>Open Section, 4’ Shoulders</th>
<th>Open Section, 8’ Shoulders</th>
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</thead>
<tbody>
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<td><strong>Geometric Design</strong></td>
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<tr>
<td><strong>Environmental Impacts</strong></td>
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<tr>
<td>Wetlands Impacts (ac.)</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Utility Relocation</strong></td>
<td></td>
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<tr>
<td>Utilities Relocation Impacts</td>
<td>Medium</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td><strong>Right-of-Way Acquisition</strong></td>
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<tr>
<td>Potential Residential Relocations</td>
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<td>1</td>
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<tr>
<td>Potential Commercial Properties Impacted</td>
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<tr>
<td><strong>Total Project Cost</strong></td>
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<tr>
<td>Estimated Construction Costs</td>
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<tr>
<td>Estimated Utility Costs</td>
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<td>Estimated Right-of-Way Costs</td>
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<td>$2,426,200</td>
<td>$2,812,600</td>
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*: All other parameters same for all alternatives.

**: Does not include wetlands/waters mitigation costs.
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
### Segment C: Comparison of Alternatives

<table>
<thead>
<tr>
<th>Comparison Parameters*</th>
<th>Existing Alignment</th>
<th>North Offset</th>
<th>South Offset</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Geometric Design</strong></td>
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</tr>
<tr>
<td>Vertical Alignment</td>
<td>55 mph</td>
<td>65 mph</td>
<td>65 mph</td>
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<tr>
<td><strong>Environmental Impacts (Approximate)</strong></td>
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<tr>
<td>Wetlands Impacts (ac.)</td>
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<tr>
<td><strong>Utility Relocation</strong></td>
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</tr>
<tr>
<td>Utilities Relocation Impacts</td>
<td>Low</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td><strong>Right-of-Way Impacts</strong></td>
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<tr>
<td>Potential Residential Relocations</td>
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<tr>
<td>Potential Commercial Properties Impacted</td>
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<tr>
<td><strong>Total Project Cost</strong></td>
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<tr>
<td>Estimated Construction Costs</td>
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<td>Estimated Utility Costs</td>
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<td>$7,520,000</td>
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</table>

*:  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
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.
State Highway 19 Improvements

Thank you!