



## TRANSPORTATION & STREET IMPROVEMENTS PROGRAM

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### Project: Pecue Realignment at Perkins Road (Perkins Road to KCSRR)

Green Light Program ID: 00  
 Project Length (feet): 3,500  
 Existing Typical Section: Two-lane  
 Proposed Typical Section: Two-lane, curb & gutter

### Project Overview

This project starts at the existing Pecue Lane(south leg)/Perkins Road intersection and ties back into existing Pecue Lane at the Kansas City Southern (KCS) railroad. Currently, the north and south legs of Pecue Lane are offset approximately 400 ft at their respective intersections with Perkins Road. This project also includes a new traffic signal at the new Realigned Pecue Lane/Perkins Road intersection. When combined with the existing Stumburg Lane project, the proposed project AA-Stumburg Lane Extension, and proposed project R2- Pecue Lane and I-10 Interchange, a south-north connection will be provided that extends from Perkins Road to Coursey Boulevard. The project will provide an alternative to both Siegen Lane and Highland Road once the I-10 diamond interchange is constructed.

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In association with:

PBS&J

GOTECH, Inc.

Neel-Schaffer, Inc.

Compliance Consultants, Inc.

Jones Walker, LLP

John C. Doiron  
MAI Appraisal Services

Rampart Resources

SSA Consultants, LLC

**ASSUMPTIONS**

- Proposed typical section is a two-lane curb and gutter, and will ultimately be a five-lane curb and gutter. The ultimate right of way width will be acquired with the construction of this project in order to facilitate the ultimate five-lane curb and gutter roadway section.
- Sidewalks and bike lanes have not been included due to the rural nature of this project.
- The reconstruction of this roadway will require sub-surface drainage system to accommodate a future five-lane curb and gutter roadway section.
- KCS railroad will allow reconstruction of the roadway as an at-grade crossing.
- Add right and left turn lanes to existing Perkins Road .
- Project budget includes the construction of a traffic signal at the new Realigned Pecue Lane/Perkins Road intersection.

**UTILITIES**

Possible Utilities	Existing	Adjust / Relocate
Underground Electric		
Overhead Electric	●	●
Overhead Electric Transmission	●	
Water	●	●
Sanitary Sewer	●	●
Telephone	●	●
CATV	●	●
Gas Distribution	●	●
Gas HP Pipeline	●	●

A subsurface utility engineering (SUE) will be performed, and related cost is included in the final engineering cost estimate.

**HYDROLOGY / HYDRAULICS**

The project will drain with cross drains that will connect to new subsurface drainage will run along the new Pecue Lane roadway.



*TRAFFIC*

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- Based on the traffic analysis with the projected traffic volume of approximately 29,694 vehicles per day, the proposed two-lane roadway section will operate at a Level of Service (LOS) E for the design year of 2030. The ultimate proposed five-lane roadway section will operate at a Level of Service (LOS) C for the design year of 2030.

*SIGNALIZED INTERSECTIONS*

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- The 2030 yr intersection of Pecue Lane at Perkins Road will require a new signal to provide a shared right-through lane, an additional through lane, and dual left turn lanes for eastbound Perkins Road; one right turn lane, two through lanes, and one left turn lane for westbound Perkins Road; one shared through-right lane and one left turn lane for northbound Pecue Road; and provide one right turn lane, one through lane, and two left turn lanes for southbound Pecue Lane.

*RIGHT OF WAY IMPACTS*

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- The ultimate five-lane curb and gutter section requires a minimum of 100' of right of way.
- The majority of the required right of way along the realigned Pecue is being donated for this project by a private developer

*ENVIRONMENTAL CONCERNS*

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- No major wetland or other environmental issues are anticipated due to the existing nature of project limits.

*SOILS*

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- Project area soils are somewhat poorly drained to moderately well drained and loamy.



**COST ESTIMATE**

Project Description:	Two-lane curb and gutter	
Project Length:	3500 Feet (0.66 miles)	
	CONSTRUCTION COST	
Section 200 -	Earthwork	\$ 135,000
Section 300 -	Base and Subbase Courses	\$ 364,000
Section 400 -	Surface Courses	\$ 9,000
Section 500 -	Pavements	\$ 533,000
Section 600 -	Structures	\$ 0
Section 700 -	Drainage Work	\$ 320,000
Section 800 -	Sanitary Sewer Work	\$ 0
Section 905 - 906	Pavement Markings & Signalization	\$ 197,000
Section 907 - 911	Concrete Curbs & Sidewalks	\$ 40,000
	SUBTOTAL CONSTRUCTION COST (2006 \$)	\$ 1,598,000
MOBILIZATION		\$ 127,840
	SUBTOTAL	\$ 1,725,840
CONTINGENCY & UNFORESEEN CONDITIONS		\$ 258,876
	SUBTOTAL	\$ 1,984,716
	TOTAL CONSTRUCTION COST (2006 \$)	\$ 1,987,716
UTILITY RELOCATIONS		\$ 55,460
TESTING		\$ 43,146
LIGHTING, LANDSCAPING, SEEDING		\$ 69,034
ENVIRONMENTAL STUDY		\$ 0
ENGINEERING		\$ By Others
ENVIRONMENTAL MITIGATION		\$ 0
RIGHT-OF-WAY		\$ By Others
	SUBTOTAL	\$ 2,155,356
PROGRAM & CONSTRUCTION MANAGEMENT		\$ 107,768
	TOTAL PROJECT COST (2006 \$)	\$ 2,263,123

Comments:

- Unit costs are assumed to include contractor overhead, profit and mark-ups
- Environmental mitigation will include environmental and protection of cultural resources
- Mobilization is expected to be 8% of construction cost
- Contingency and Unforeseen Conditions are expected to be 15% of construction cost
- Testing is expected to be 2.5% of construction cost
- Lighting, Landscaping, and Seeding is expected to be 4% of construction cost
- Note: Percent Cost is for the GLP Program Average and NOT project specific obligation
- Program & Construction Management is expected to be 5% of project costs

