CITY OF COFFEYVILLE **BOARD OF COMMISSIONERS AGENDA ITEM**		
MEETING DATE	September 24, 2013	
RESOLUTION OR ORDINANCE NUMBER	R-13-82	
AGENDA TITLE	**2015 Geometric Improvement KDOT Project Number 166-63 KA-3039-01, Design Engineering Contract with Transystems Inc. of Independence Kansas**	
REQUESTING DEPARTMENT	Engineering	
PRESENTER	Scott Massman	
FISCAL INFORMATION	Cost as recommended:	Fee Not to exceed $49,400.00 City Share $4,940.00 (10%)
	Budget Line Item:	520-5-230-868
	Balance Available	$4,940.00
	New Appropriation Required:	[ ] Yes [X] No
PURPOSE	Reconfiguration of the Existing Intersection of 166-169 Highway and East 8th Street.	

BACKGROUND	A selection committee reviewed statements of qualifications as submitted by four out of six contacted firms. The findings of the selection committee by percent basis are as follows: 1 TRANSYSTEMS 18.22% 2 AMA 17.86% 3 PEC 16.99% 4 TSE 16.91% 5 CFS 16.14% 6 SCHWAB-EATON 13.88% The recommendation of the selection committee is Transystems Inc. of Independence Kansas, because of past experience in the project scope and by their excellent credentials. The Geometric Improvement project will be a Reconfiguration of the Existing Intersection of Highway 166-169 and East 8th Street, providing a more manageable means of entering or exiting the 4-lane highway. The total not to exceed amount for this engineering contract is $49,400.00. Design engineering is a 90-10 percent match yielding the city's share to be $4,940.00.
SPECIAL NOTES	
ANALYSIS	
PUBLIC INFORMATION PROCESS	
BOARD OR COMMISSION RECOMMENDATION	
STAFF RECOMMENDATION	Authorize Contract with Transystems, Inc. of Independence Kansas, for Design Engineering Services for the 2015 Geometric Improvement, KDOT Project Number 166-63 KA-3039-01
REFERENCE DOCUMENTS ATTACHED	2015 Geometric Improvement Map.pdf Transystems Scope of Service.pdf

RESOLUTION NO. R-13-82

A RESOLUTION TO AUTHORIZE THE EXECUTION OF AN ENGINEERING SERVICES CONTRACT WITH TRANSYSTEMS INC. FOR PRELIMINARY DESIGN FOR THE KANSAS DEPARTMENT OF TRANSPORTATION 2015 GEOMETRIC IMPROVEMENT KDOT PROJECT NUMBER 166-63 KA-3039-01, DESIGN ENGINEERING CONTRACT FOR THE RECONFIGURATION OF THE INTERSECTION OF EIGHTH STREET AND HIGHWAY 166-169 (NORTHEAST STREET).

BE IT RESOLVED by the Board of Commissioners of the City of Coffeyville, Kansas that the Mayor and City Clerk be and are hereby authorized and directed to execute and authorize the execution of an Engineering Services Contract with Transystems, Inc. of Independence Kansas, for the not to exceed amount of $49,400.00 for Preliminary Design Engineering work for preliminary design of the Kansas Department of Transportation's Geometric Improvement Project No. 166-63 KA-3039-01, (Eighth and Northeast Streets).

ADOPTED THIS 24TH DAY OF SEPTEMBER 2013.

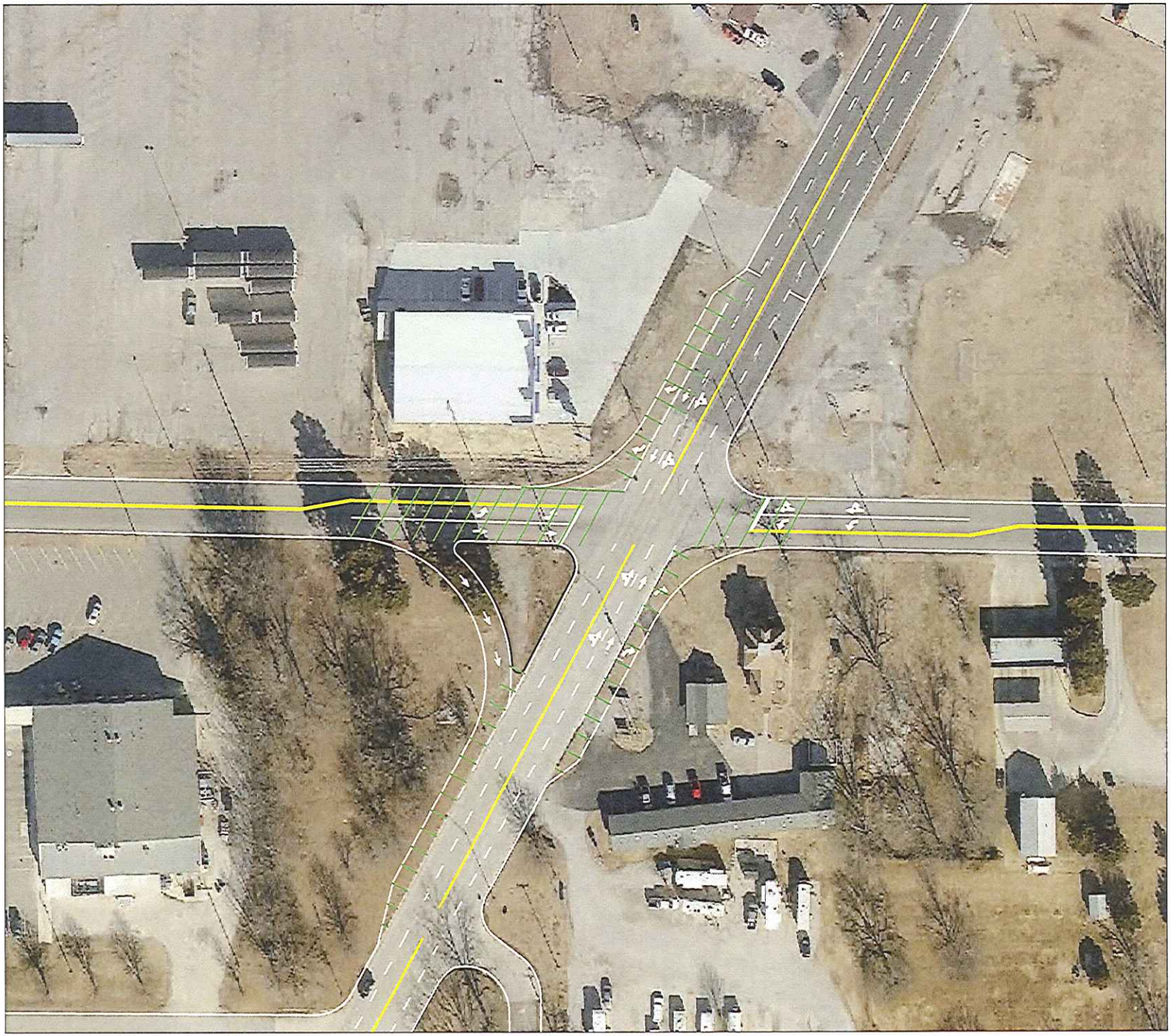
_____
David George, Mayor

ATTEST:

_____
Cindy Price, City Clerk

APPROVED AS TO FORM AND LEGALITY:

_____
Paul Kritz, City Attorney



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PROPOSAL FOR 2015
GEOMETRIC
IMPROVEMENT IN
COFFEYVILLE,
KANSAS

Coffeyville Engineering Department	DESIGNED BY: TKO	CHECKED BY:
	DRAWN BY: TKO	APPROVED BY:
	SCALE: 1"= 100'	CONTRACT NO.
TITLE: 8TH AND NORTHEAST GEOMETRIC IMPROVEMENT		DATE: 3/21/12
		REF. #
		SHEET #

DWG. CODE: Z:\ENGINEER\DWG\EDOT\GEOMETRIC IMPROVEMENT\8TH AND NORTHEAST.DWG

Exhibit "B"
Scope of Service
Intersection of 8th Street & US 166/169
Coffeyville, KS

PROJECT UNDERSTANDING

The general project improvements as agreed upon by the City of Coffeyville and TranSystems include constructing turn lanes and storm sewer at the intersection of East 8th Street & US-166/169. The project will include the design of the roadway, drainage, signing, pavement marking, construction sequencing and public involvement. The disturbed areas will be seeded upon completion of the project.

The project location is in the east part of Coffeyville, Kansas and serves as an arterial road to the fair grounds. The location is generally described as in Section 31, Township 34 South, Range 17 East in Montgomery County, Kansas.

FINAL DELIVERABLES

The City will be provided one full size set of final plans, one full size (22" x 36") electronic PDF copy and one half size (11"x17") paper set of final plans and the Engineer's Opinion of Probable Construction Cost. KDOT will be provided one full size (22" x 36") set of electronic PDF copy final plans and the Engineer's Opinion of Probable Construction Cost. Project Specific Special Provisions where applicable will be written and submitted by TranSystems.

PROJECT TASKS

The project will be conducted in six phases, which are listed below with a brief description for each phase.

Phase 100 - Preliminary Plans and Alignments	Data Collection and Survey
Phase 200 - Field Check Plans	Development and Initial Project Analysis
Phase 300 - Office Check Plans	Further Refinement of Project, and detail development.
Phase 400 - Final Check/PSE Plans	Final Review of plans
Phase 500 - Final Plans	Completion of Plans
Phase 600 - Shop Drawings	Review of Shop Drawings

PHASE 100 PRELIMINARY PLANS AND ALIGNMENTS

Task 100 Survey/Basemap

Survey/Basemap

101. Control-Establish and supplement Horizontal Control throughout the project limits on corrected Kansas State Plane Coordinate System, NAD83 (1997 adjustment) reduced to ground, South Zone. Reference tie and control sketches on all control points along project. Estimation of 6 Control Points will be established for future project use. Establish and supplement Vertical Control throughout the project limits on NAVD 88 Datum. Set a minimum of three (3) project benchmarks located outside the survey limits (shown on Exhibit C) to allow them to remain undisturbed during construction.

102. Topographical Survey- Survey- Survey will provide field survey necessary for preparation of roadway plans. Project survey limits (shown on Exhibit C) will begin +/- 380' north of the intersection of 8th street and US 166/169 and continue south along US 166/169 to and include the intersection of Moon Street and US 166/169. Then 300' west of the 8th street and US 166/169 intersection continuing east 160' of the intersection. The survey limits will extend 75' beyond existing right-of-way.

103. The topographic survey shall encompass all the area within the above described boundaries. Survey will include locating, but not limited to the following features within the project limits as described (pavements, driveways, building faces, utilities, drainage structures with measure down information, natural ground elevations, all trees and shrubs, trees 6" or above noted with size and type, curbing, power poles, signs, fences, traffic signal poles, traffic signal control boxes and etc.) It is assumed right of entry for surveys and geotechnical work will be completed by the City of Coffeyville.

104. Utilities- All utilities will be located using the Kansas "One Call" system. The resulting markings will be surveyed at the same time as the topographic survey. No physical locates of any underground utilities will be completed as a part of the survey. Survey will include the flow lines of any surveyed gravity storm or sanitary sewer lines that have easily accessible manholes.

105. Existing storm sewers and channel-Existing storm sewers, storm inlets, channels will be located and flow lines surveyed. Flow lines will not be included in the surface triangle file.

106. Base Map Development- The raw field survey gathered topographic features and utility data will be used to develop the base map of the planimetric features along with the ground surface model to create contours for the project. The base map will be a plan view representation of the project with contours presented at 1-foot minor and 5-foot major intervals. Base maps will be prepared in a format consistent with KDOT. The maps will be prepared in English units and at a scale of 1:20.

107. Property Research-Conduct Courthouse research on the project. This will include items such as, but not limited to, parcel tax maps, printouts of ownership, utility maps, plats, road records and road plans. Conduct field research, search, recover and locate physical evidence or existing property corners, quarter section corners and section corners along the project and outside of project if necessary to assist in establishing existing right-of-way and ownership base map by using a combination of plats, research acquired information, including Title Reports that will include copies of all easements and encumbrances and existing survey data. Field survey will be tied to nearest section corners and quarter section corners, with reference ties to their locations, such that the right-of-way within the project limits can be established. It is anticipated that five (5) section corners or quarter corners will be necessary to establish should the right-of-way and

should be included in the scope of services. Should the corner not exist, costs for the re-establishment of the corner are not included in the contract, however if the City desires corner re-establishment, TranSystems may enter into a supplemental agreement to reestablish missing section and/or quarter corners. Prepare an ownership boundary and existing right-of-way strip map along the project alignment showing but not limited to section lines, property lines, existing easements and ownership.

Task 200 Preliminary Plans, Alignments and Estimates

201. Preliminary Plans/Alignments- Preliminary plans and alignments will be prepared and submitted to the City and KDOT for review. The proposed typical section will also be reviewed at this time for approval. Preliminary Cost estimates will be prepared for the options.

Task 300 Communications

301. Meet with Agencies – Meet with City Staff and KDOT to kick-off the project, to address coordination between all parties to provide access for survey, plan submittals and schedules and necessary permitting as required for this project. A second meeting with staff will be held to discuss the proposed alternatives.

302. Utility Meetings – In addition to contacting Kansas "One-call", TranSystems will provide two sets of Utility Plans to each utility company within the project limits. One set of utility plans will be provided at Field Check and the second at Office Check.

Phase 200 Field Check Plans

Task 100 Plans and Estimates

101. TranSystems will develop the design geometry for the project using the base mapping obtained in the Field Surveys portion of this agreement and in accordance with due consideration for comments received from City staff and KDOT. The TIN model created in the Field Surveys task will also be used during this phase to develop the vertical alignment information. This data, supplemented by City GIS and USGS mapping, will be used by TranSystems to define the existing drainage basins and size appropriate drainage structures per City of Coffeyville and KDOT criteria.

102. Plan Preparation –Field Check plans will be prepared and submitted in accordance with KDOT policies and practice, and will be approximately 50% complete. The following sheets are anticipated to be included in this submittal:

- Title Sheet
- Typical Sections/General Notes
- Roadway Plan and Profile Sheets
- Miscellaneous Details
- Storm Drainage Sheets
- Summary of Quantities
- Traffic Control (General discussion and overview)
- Construction Phasing (General overview)
- Cross Sections of Pavement Surfacing and Grading, maximum of 25 ft. intervals (Driveways and cross road pipes will be shown in the cross sections)

103. TranSystems will submit one full size (22" x 36") electronic PDF copy and one half size plans (11"x17") to the City on bond paper for review and one set of full size plans (22"x36") in electronic PDF format to KDOT.

Task 200 Communications

201. Field Check Meeting-TranSystems will attend one (1) Field Check meeting with the City and KDOT on site to review the plans. This task also includes preparation of meeting minutes.

PHASE 300 OFFICE CHECK PLANS

Task 100 Plans and Estimates

101. Office Check plans will incorporate the comments received at the Field Check Meeting and will further develop the plans. This submittal will be approximately 90% complete with all details and quantities completed. The following sheets are anticipated to be included in this submittal. This list is for informational purposes only and the actual plan set may vary from this list. However, the list is included to outline the general concepts upon which this agreement is based.

102. Plans Preparation-Once the Field Check Plans are approved, and geologic and hydraulic recommendations have been completed and approved, Office Check plans will be prepared and submitted in accordance with KDOT policies and practice. These plans will be approximately 90% complete plans, which will include the following items:

- Title Sheet
- Typical Sections/General Notes
- Roadway Plan and Profile Sheets
- KDOT Standard Details
- Miscellaneous Details
- Erosion Control Plans – KDOT typical BMP sheets
- Pavement Marking and Signing Plans
- Storm Sewer Profiles
- Summary of Quantities
- Traffic Control/Construction Phasing
- Cross Sections (Driveways and cross road pipes will be shown in the cross sections)

TranSystems will submit one full size (22" x 36") electronic PDF copy and one half size plans (11"x17") to the City on bond paper for review and one set of full size plans (22"x36") in electronic PDF format to KDOT.

103. Special Provisions- Prepare Special Provisions to supplement the KDOT standard construction specifications as needed.

104. QA/QC-Perform quality assurance/quality control reviews of the designs and drawings.

Task 200 R/W and Construction Easements

201. Property Descriptions-Write Survey Descriptions for either new right-of-way, permanent and/or temporary easements for an estimated four (4) parcels of land. On two (2) parcels we are estimating two (2) descriptions containing one (1) for permanent right-of-way and one (1) for temporary easement purposes. On two (6) parcels we are estimating one (1) description for temporary easement purposes. A total of six (6) survey descriptions are estimated. Prepare one (1) parcel exhibit containing permanent right-of-way and/or temporary easements for each parcel affected by acquisitions, for a total of six (6) parcel exhibits. Legal descriptions and parcel exhibits shall be sealed by a licensed surveyor in the State of Kansas. A word document for each description will also be provided to the City.

Task 300 Utility Coordination

301. Utility Check -TranSystems will prepare one colored full size utility check set plans to each utility company to verify with the utility owners within the project limits for verification of accuracy following the Field Check Phase. Alternately, pdf plans will be provided at the utility companies' request.

Task 400 Permitting

401. Permitting – KDOT will handle all environmental clearances associated with the project. TranSystems will prepare applicable permit applications as required, no permits are anticipated, but we anticipate checking the US Army Corps of Engineer Permit, Kansas DWR Streams Permit and KDHE NOI.

TranSystems will prepare the KDOT Form 1307 - List of Permits & Status.

Task 500 Public Involvement

501. TranSystems will conduct one (1) public meeting to inform the adjacent property owners of the project concepts and to gather input. Meeting notices for the public meeting will be distributed by the City of Coffeyville.
    a. An open house format with no formal presentation is assumed.
    b. The City will provide the meeting room for the public meeting.

PHASE 400 FINAL CHECK/PS&E PLANS

Task 100 Plans and Estimates

101. Plans Preparation-Once the Office Check Plans are approved, Final Check plans will be prepared and submitted in accordance with KDOT policies and practice.. These plans will be approximately 99% complete plans, which will include all of the items in Office Check.

102. TranSystems will submit one full size (22" x 36") electronic PDF copy and one half size plans (11"x17") to the City on bond paper for review and one set of full size plans (22"x36") in electronic PDF format to KDOT.

PHASE 500 FINAL PLANS

Task 100 Plans and Estimates

101. Plans Preparation-Once the Final Check Plans are approved, Final plans will be sealed and submitted in accordance with KDOT policies and practice. This should complete the plan production portion of the contract.

102. TranSystems will submit one full size set of final plans, one full size (22" x 36") electronic PDF copy and one half size (11'x17") paper set of final plans and the Engineer's Probable Construction Cost. KDOT will be provided one full size (22" x 36") set of electronic PDF copy final plans and the Engineer's Opinion of Probable Construction Cost.

PHASE 600 SHOP DRAWINGS

Task 100 Engineering/Design

101. Reviews-Provide shop drawing review and approval of details submitted by the Contractor.

Proposal Conditions

The following is a list of conditions that were the basis for this proposal:

- The City of Coffeyville will coordinate with all utilities for relocation of existing facilities. TranSystems will attend two (2) utility coordination meetings following the Field Check Phase and the Office Check Phase. TranSystems will submit pdf copies of the utility check plans to the utility owners, City of Coffeyville and a tabulation of utility conflicts spreadsheet by station and offset prior to the utility coordination meetings. Independent coordination may be completed should the utility companies not attend the utility coordination meetings;
- Should public utilities need to be relocated as a part of this project, i.e. waterline relocations, the City of Coffeyville will be responsible for specific relocation work;
- KDOT Construction Specifications will be used as the governing specifications for the project and will be supplemented by Project Special Provisions as required;
- Geological investigations not included in this proposal. A separate agreement with the City of Coffeyville will be negotiated to include these services if required;
- Pavement designs are not included as part of this proposal. Proposed pavement sections will be based on existing pavement sections and KDOT recommendations;
- No lighting or aesthetic designs are included as part of this proposal;
- Drainage design is assumed to generally occur within the project limits. Should existing storm sewer lines or other miscellaneous drainage improvements be required outside the project limits TranSystems will enter into a supplemental agreement to complete that work;
- Services for negotiating, staking or surveying the proposed property easements or acquisitions are not included in this contract;
- The scope of work does not include waters of the U.S. mitigation (likely not required);
- Floodplain development permit or FEMA flood map revisions are not included in this contract;
- Utility Locators will mark the lines without delay. An attempt to get As-Built Plans of the utilities from owners of the utilities. Utilities will be shown to the best of the knowledge by the One-call locator or by As-Build Plans supplied to TranSystems by client;
- The City of Coffeyville shall be responsible for obtaining Right of Entry from all private property owners within the survey and geotechnical limits;
- Assumption is that section corners and quarter section corners are in place and of record;
- Title Reports that would include Ownerships, Easements and Encumbrances will be obtained for this project and shall include tax information, last deed of record, mortgage information, ownerships names, site and mailing address and copies of all supportive documentation necessary to assist in establishment of existing right-of-way

and ownership lines. (Estimated of +/- 4 parcels are needed to be established to properly show the current existing Right-of-Way.) It is assumed seven (4) Title Reports that would include Ownerships, Easements and Encumbrances; reports shall include tax information, last deed of record, mortgage information, ownerships names, site and mailing address and copies of all supportive documentation necessary to assist in establishment of existing right-of-way and ownership lines;

- The City of Coffeyville will acquire all properties and/or easements needed for the project as defined by the legal descriptions and tract maps outlined herein. The City will be responsible for inserting the legal descriptions onto the appropriate acquisition forms prepared by the City;
- Microstation V8i or later will be used for all of the CAD file creation to prepare the plans noted herein;
- Survey format shall meet KDOT Survey requirements;
- The selected contractor may request final reference files from TranSystems and enter into a separate agreement with TranSystems regarding the use of the electronic data

It is anticipated that the City will provide the following:

- Provide the most current aerial photography of the project currently on file;
- Attend meetings with regulatory agencies to discuss alignment alternatives;
- Provide any notices and space for the public meeting or individual meetings with adjacent property owners;
- Provide any existing drainage studies and/or plans of the project area currently on file

Preliminary Engineering Fee
Intersection of 8th Street & US 166/169
Coffeyville, KS

Task			Eng IV	Eng III	Eng I	Tech. III	Hours	Dollars
Survey								$ 6,400.00
Preliminary Design/Field Check			10	40	40	100	190	$ 17,000.00
Office Check			10	30	30	60	130	$ 12,050.00
Final Check			5	25	30	40	100	$ 8,950.00
QA\QC			10	20			30	$ 4,000.00
Mileage								$ 500.00
Reproduction Expenses								$ 500.00
							Total =	**$ 49,400.00**