DA 281-2
Rev. 4-13

State of Kansas - Department of Administration
OFFICE OF PERSONNEL SERVICES

Position Description

Read each heading carefully before proceeding. Make statements simple, brief, and complete. Be certain the form is signed. Send the original to the Office of Personnel Services.

CHECK ONE: ☐ NEW POSITION ☒ EXISTING POSITION

Agency Number: **276**

Part 1 - Items 1 through 12 to be completed by department head or personnel office.

1. Agency Name **KDOT** **Kansas Department of Transportation**	9. Position No. **K0225294 /** **00-14-42-802**	10. Budget Program Number	
2. Employee Name (leave blank if position vacant)		11. Present Class Title (if existing position) Field Survey Proj Mgr (LS II) (UNCL/NE)	
3. Division Engineering and Design		12. Proposed Class Title	
4. Section Right of Way	For	13. Allocation	
5. Unit Field Survey	Use	14. Effective Date	Position Number
6. Location (address where employee works) City: TBD County: TBD	By	15. By / Approved	
7. (circle appropriate time) Full time X Perm. X Inter. Part time Temp. %	Personnel	16. Audit Date: By: Date: By:	
8. Regular hours of work: (circle appropriate time) FROM: 7:00 AM To: 6:00 PM	Office	17. Audit Date: By: Date: By:	

PART II - To be completed by department head, personnel office, or supervisor of the position.

18. If this is a request to reallocate a position, briefly describe the reorganization, reassignment of work, new function added by law or other factors which changed the duties and responsibilities of the position:

Supervises a preliminary survey crew in the acquisition and development of survey data to support highway design and right of way control for KDOT engineering projects.

19. Who is the supervisor of this position? (Person who assigns work, gives directions, answers questions and is directly in charge)? Who evaluates the work of an incumbent in this position?

Name	Title	Position #
Ronald Feldkamp	Land Surveyor (LS Mgr) / Survey Coordinator	K0230467 / 00-14-40-802

20. a) How much latitude is allowed for the employee in completing the work? b) What kinds of instructions, methods, and guidelines are given to the employee in this position to help do the work? c) State how and in what detail assignments are made.

a) Employee is given the latitude to complete the work in the most efficient manner possible.
b) Standard Operating Manuals (SOM's), Equipment Manuals, and the KDOT Design Manual dictate the methods and procedures to utilize in completing work assignments.
c) Work assignments include written survey requests, which are project specific, and verbal instructions, which outline the task to be completed.

21. Describe the work of this position using the page or one additional page only.

No. %	E or M	
		Leadership Statement: It is expected that the person in this position will provide effective leadership to their assigned work unit. This includes such things as leading by example, providing performance objectives, midyear performance feedback discussions, timely performance reviews, coaching and counseling, discipline, and providing employee development opportunities for employees under their supervision.
1. 35%	E	Supervises the survey crew in the daily activities of the survey. Performs checks for completeness and accuracy of the survey effort. Utilizes the Bureau of Design Survey Manual as a reference in determining if the survey data meets the required criteria and form for the various types of surveys performed, which are described as follows: GEODETIC- These types of surveys are incorporated into the National Geodetic Survey (NGS), and typically are utilized as a uniform coordinate base for major corridor projects. Performs reconnaissance of existing monuments, establishment of new monuments along the project, and making the necessary observations to determine the positions of the new monuments. Utilizes observations with electronic theodolites, or by coordinating with the Global Positioning System (GPS) Survey Coordinator in conducting GPS survey techniques. The GPS Survey Coordinator is responsible for the field portion of the GPS survey effort. Performs surveys made by conventional means, i.e., measurement of the angles and distances with an electronic theodolite and electronic distance machine. Maintains awareness of the requirements of obtaining data in "Blue Book" format for incorporation into the NGS system for Second Order Traverse Networks. Demonstrates a thorough understanding of State Plane Coordinates, the ability to calculate project adjustment factors to develop project coordinates derived from State Plane Coordinates. Maintains knowledge of traverse calculations and adjustments. The Survey Coordinator reviews the results of this survey activity. ROUTE-DESIGN- These surveys are the basis of the design effort for the plans developed by the Bureau of Design. This effort includes alignment recovery or establishment, vertical control recovery and bench mark establishment, obtaining elevations and topographic information within the project location and scope. This is accomplished by the use of an electronic theodolite and a data collector, utilizing designated feature codes and techniques. Downloads information obtained via a data collector into a laptop computer for review, edit and transmitting to the office. Operates and trains fellow employees in the use of a laptop computer and the appropriate software. Additional survey data included with these types of surveys include utility locations, bridge survey data, and drainage area mapping. Determines that all facets of the design survey have been completed within the project limits identified, and within the accuracies designated in the Survey Manual. The Survey Coordinator is responsible for review of this effort. PHOTOGRAMMETRIC- This type of survey is a combination of field control, combined with aerial photography, to develop ground elevations and map the physical features above ground. The Field Survey Project Manager will be responsible for gathering all the photo control points necessary for the projects, along with the obscure areas which are identified by the Plotter Supervisor. Maintains a working knowledgeable as to the amount of photo control targets to establish, and to the accuracy necessary as described in the Survey Manual. The Survey Coordinator reviews this survey effort.
2. 25%	E	Supervises, schedules, and completes the survey effort. Communicates the various tasks which are assigned to individual crew members, sometimes on a daily basis. Prioritizes the work phases based upon crew personnel availability, employee experience, traffic control, and weather conditions. Furnishes project requirements and record information to facilitate the survey effort, along with monitoring of the survey progress so that the schedule dictated is being met.
3. 15%	E	SUPERVISION- Performs regular feedback sessions with each employee and completes the Annual Performance Review for each employee under their supervision. Coordinates and tracks the employees enrolled in the Engineering Technician Training/Progression program. Assists in the testing and evaluation for compliance of the employee participating in the Engineering Technician Progression program.
4. 15%	E	LAND- Contacts property owner relative to the project. This is necessary to obtain permission to trespass on adjacent property for the survey activity. Conveys the scope of the project and the activities to be accomplished to the owner or tenant. Researches deed information along the project. Furnishes copies of adjacent deeds with the survey data for plan preparation. Researches public records. Facilitates ties to public land corners and boundary control adjacent to the project necessary for the development of legal descriptions for right of way acquisitions. Reviews deeds and plats relative to the project site and determines necessary ties. Completes and documents this effort in accordance with State Statutes. The Survey Coordinator reviews this survey activity.

5. 10%	M	Trains survey personnel. Completes and submits employee and equipment reports as necessary. Maintains and calibrates all survey vehicles and equipment. Uses equipment manuals and guidelines established by KDOT policy as the basis for equipment maintenance. The Survey Coordinator is responsible for the review of this effort. Performs other duties as assigned.
	E	**Must be capable of performing the essential physical functions detailed in Section 28.**

* The description of how the work is to be performed does not preclude the consideration of reasonable accommodation for qualified people with disabilities.

22. a. If work involves leadership, supervisory, or management responsibilities, check the statement which best describes the position:
( ) Lead worker assigns, trains, schedules, oversees, or reviews work of others.
(X) Plans, staffs, evaluates, and directs work of employees of a work unit.
( ) Delegates authority to carry out work of a unit to subordinate supervisors or managers.

b. List the names, class titles, and position numbers of all persons who are supervised directly by employee on this position.

Name	Title	Position #
Jeffery Piroutek	Engineering Technician Specialist	K0231286 / 00-14-42-803
Aaron Willcoxon	Engineering Technician	K0225083 / 00-14-42-806
Levi Tate	Engineering Technician	K0236879 / 00-14-42-804

23. Which statement best describes the results of error in action or decision of this employee?
( ) Minimal property damage, minor injury, minor disruption of the flow of work.
(X) Moderate loss of time, injury, damage or adverse impact on the health and welfare of others.
( ) Major program failure, major property loss, or serious injury or incapacitation.
( ) Loss of life, disruption of operations of a major agency.
Please give examples.
Surveys which are not in accord with appropriate criteria and the application of appropriate engineering principles may result in additional costs and delays. Projects which do not meet schedule or budget criteria can result in failure to meet agency goals.

24. For what purpose, with whom and how frequently are contacts made with the public, other employees, or officials?
Daily contacts with the general public and property owners in obtaining right of entry, government officials, utility owners and coworkers in obtaining record/field survey information.

25. What hazards, risks or discomforts exist on the job or in the work environment?
(X) Frequent exposure to extreme cold/heat wet/humid conditions.
(X) Exposure to mechanical parts such as but not limited to, muffler, exhaust pipes, and other radiant energy equipment.
(X) Exposure to noise, vibrations, fumes, odors, gases, dust and/or poor ventilation.
(X) Works in traffic.
(X) Other:

Frequent exposure to farm animals, poisonous insects, plants, snakes, wildlife encountered in pastures and wooded areas.

26. List machines or equipment used regularly in the work of this position. Indicate the frequency with which they are used:
Daily: Computer, Calculator, Hand digging tools/hammers/sledgehammers, traffic control signs, operating motorized vehicles.
Several times a week: Electronic Survey Equipment, Gass Powered jack hammer/hammer drill

For more specific information on equipment used regularly please see section 28.

PART III - To be completed by the department head or personnel office

27. List the minimum amounts of education and experience which you believe to be necessary for an employee to begin employment in this position.

Education – General

Education or Training - special or professional

Licenses, certificates, and registrations

Minimum Requirement: Land Surveying license recognized by the Kansas Board of Technical Professions.

Special knowledge, skills, and abilities

Experience - length in years and kind

Five (5) years' experience in highway route surveying is preferred.

Two (2) years supervisory experience is preferred.

28. **SPECIAL QUALIFICATIONS**

State any additional qualifications for this position that are necessary either as a physical requirement of an incumbent on the job, a necessary special requirement, a bona fide occupational qualification (BFOQ) or other requirement that does not contradict the education and experience statement on the class specification. A special requirement must be listed here in order to obtain selective certification.

ESSENTIAL PHYSICAL FUNCTIONS/DUTIES - Duties that are fundamental to the position based on the function and the results to be achieved, rather than the manner in which they are being performed. Duties that are directly related to the reason the position exists and cannot be reassigned without changing the nature of the position. All job duty physical demands are essential physical functions of this position, and the employee must be able to perform them.

Definition of Frequency:

Occasional= 1-33% (1 - 100 reps) Frequent= 34-66% (IOI -500 reps) Continuous= 67- 100% (S0o+ reps)

Job Duty	Job Duty Physical Demands/Comments	Weight/ Force	Frequency
Travel to Various Survey Locations	Sit – Typically 10 – 60 minutes; To access various locations to be surveyed	N/A	Occasional
	Sit – On occasion, may drive up to 6 hours across the State	N/A	Continuous
	Bilateral Hand Coordination – To operate steering wheel, gear shift, etc.	N/A	Occasional
	Other– Lower Extremity Use; to operate foot controls (gas pedal, brake)	N/A	Occasional

Job Duty	Job Duty Physical Demands/Comments	Weight/ Force	Frequency
Survey the Land	Walk – Outdoors, on uneven terrain (sloped areas); Up to several miles in a day; This includes on highways, through brush, pastures, occasionally through streams, etc.; to access land to be surveyed	N/A	Continuous
	Stand – Outdoors, on uneven terrain, possibly in water; to survey the land	N/A	Frequent
	Climb – Climb over barbed wire fences; to access land to be surveyed	N/A	Occasional
	Forward Bend Stand – To use various tools such as the shovel, pick axe, tamper, drill, etc.	N/A	Occasional
	Stair Climb w/ Carry– Up to 200 ft., up to 2 flights of stairs; to bring the car battery to the motel room to charge (the battery is used to run the radio that runs the GPS base)	40 lbs.	Occasional
	Floor-Waist Lift – Floor to 34" high; to retrieve/replace equipment from the truck (surveying instrument in the case 20#, trip 13#, legs & level 18#, prod rod 7#, backpack 16#, 7 ft. GPS rod 8#, pick axe 8#, sledgehammer 8#, rebar cutters 15#)	20 lbs.	Occasional
	Carry – Up to 1 mile at a time; To bring equipment from truck to survey areas (surveying instrument in the case 20# one-handed carry, tripod 13#, legs & level 18#, prod rod 7#, backpack 16#, 7 ft. GPS rod 8#)	20 lbs.	Frequent
	Floor-Waist – Floor to 34" high to retrieve supplies from the truck including, 50# bag pf asphalt, and jack hammer with tamper tool 55# (requires two-man lift),	50 lbs.	Occasional
	Other – Use a machete to clear brush, to access land to be surveyed (when needed)	N/A	Occasional

Job Duty	Job Duty Physical Demands/Comments	Weight/ Force	Frequency
Complete Paperwork	Sit – To input data into the computer, generate reports, etc.	N/A	Occasional
	Bilateral Hand Coordination – To input data into the computer, generate reports, etc.	N/A	Occasional

Signature of Employee Date

Signature of Personnel Official Date

Signature of Supervisor Date

Signature of Agency Head or Appointing Authority Date