

Board of County Commissioners Agenda Request



Requested Meeting Date: January 24, 2022

Title of Item: Approve Consultant's Recommendation

✓ REGULAR AGENDA	Action Requested:	Direction Requested
CONSENT AGENDA	✓ Approve/Deny Motion	Discussion Item
INFORMATION ONLY	Adopt Resolution (attach dr	aft) Hold Public Hearing* e copy of hearing notice that was published
Submitted by: Bobbie Danielson Department: Human Resources		-
Presenter (Name and Title): Bobbie Danielson - Human Resources Director		Estimated Time Needed: 2 Minutes
Summary of Issue:		
The Senior Land Survey and Mapping Technician job description was submitted for re-evaluation. The consultant (external vendor) recommends the position increase from Grade 5 to Grade 6. Revised job description attached.		
The AFSCME Courthouse Agreement provides a 5% or \$1/hour increase for reclassification, not to exceed the scale maximum. The incumbents wage will increase from \$31.20/hour to \$32.75/hour, effective January 24, 2023, contingent upon Board approval.		
Alternative Outline Effects	. 01 /0	
Alternatives, Options, Effects on Others/Comments:		
Recommended Action/Motion: Motion to accept consultant's recommendation to increase the Senior Land Survey and Mapping Technician position from Grade 5 to Grade 6, effective 1/24/2023.		
Financial Impact: Is there a cost associated with this request? What is the total cost, with tax and shipping? \$ 3,600.00		
Is this budgeted? Yes Vo Please Explain:		





SENIOR LAND SURVEY **AND MAPPING** TECHNICIAN

DepartmentLand DepartmentGradeGrade 5(TBD)Reports toCounty SurveyorFLSA StatusNon-exempt

Union Status AFSCME Courthouse Unit

Final Appointing Authority

This position shall not be filled until final approval of the County Administrator. All offers of employment are made in writing by the Human Resources Department.

Job Summary

To establish land boundaries in accordance with federal regulations, state statutes and common law. To eonstruct or rehabilitate Functions as survey lead worker/project supervisor conducting skilled surveying work, including but not limited to, challenging boundary and location surveys, General Land Office (GLO) section resurvey and Public Land Survey System (PLSS) corner maintenance, horizontal and vertical control surveys, set and maintain County Benchmarks, and similar related duties which are heavily relied upon by other County departments, governmental bodies, private surveyors and the general public and control the location of public and private property boundaries. Responsibilities include directing (mentoring) County Surveyor Division technical staff as to proper surveying procedures and methods. Establishes land boundaries in accordance with federal regulations, state statutes and common law. Constructs or rehabilitates land corner monuments where previously set corners are lost or do not exist, to verify that previously set corners and accessories are present and in their proper location, and to perform other land survey related duties. Reports to the County Surveyor, directs the work of project survey crews and reviews the work of assigned staff for quality control purposes.

Supervision Received

Employees working in this job classrole work under general supervision and usually receive some instruction with respect to details broad objectives and expected outcomes provided. Use of most assignments, but independent judgement and the ability to exercise independent decision making is required. Work is reviewed on completion or when outcomes are free to develop their own work sequences within established procedures, methods, and policies. They are achieved. Is often physically removed from their supervisor and are is only subject to periodic supervisory checks.

This position reports to the Assistant Land Commissioner, but also receives limited work oversight from the Land Survey Coordinator. County Surveyor.

Supervision Exercised



Position Description

Serves as a work leader for the <u>Assistant Land Survey and Mapping Technician and other technical staff</u> and occasionally for seasonal survey crew or equipment operators. Elements of direct control over these positions include assigning tasks, monitoring progress and <u>work flow workflow</u>, checking the product for timeliness and correctness or soundness, and providing input into supervisor's actions. The current incumbent reviews for completeness and format and they send it to the County Surveyor for approval, but the current incumbent has not done scheduling or discipline.





Essential Functions

This position description is not intended to be all-inclusive. Employee may perform other essential and nonessential functions as assigned or apparent to meet the ongoing needs of the department and organization. Regular attendance and punctuality are essential requirements of this position.

Both the Land Commissioner and County Surveyor are OK with the way these functions are worded.

- 1. Leads survey crew members in the field on land surveys, corner searches, and corner perpetuation program activities. Operates all land surveying equipment, i.e. Transit, total station, GPS sensors and receivers. Completes land surveys according to the rectangular land survey system for the determination of area and the monumentation of the same.
- 2. Locates existing GPS monuments and determines location for GPS monuments to establish and complete county-wide GPS monument grid system. Locates and sets GPS monuments for future grid system.
- 3. Researches existing survey information prior to field survey work.
- 4. Maintains, compiles and computes survey field notes of survey in progress or when complete.
- 5. Files completed survey notes.
- 6. Meets with adjacent landowners, general public, township officers, and other agencies regarding past, present and future surveys.
- 7. Compiles existing survey data for surveyors, other agencies and the general public.
- 8. Confers with private land surveyors, firms or other county, state or federal departments on projects of mutual interest or prior experience in certain areas.
- 9. Attends seminars and educational classes to improve knowledge and ability.
- 1. Designs and prepares detailed survey plans. Acts independently or leads others during design activities. Interprets and reduces field survey data. Using computer aided drafting system and complicated surveying software, applies complex surveying and mapping design principles, standards and calculations to surveying and mapping projects according to practices recognized by the State of Minnesota.
- 2. Performs preliminary surveys for highway construction projects. Acts independently or leads others during vital preliminary land surveying activities. Research existing survey data for known horizontal and vertical control points and locate them in the field. Collects data for the design of road and bridge construction projects. Performs complex surveys for geodetic control, boundary surveys, Public Land Survey monument perpetuation and maintenance, preliminary, route, topographical, hydraulic and construction using the following or combination thereof: conventional survey equipment, a Robotic Total Station, Data Collector, Real Time Kinematic (RTK) Bridge and Global Navigation Satellite System (GNSS/GPS). Responsible for equipment, staff and performing research relative to field crew operations.
- 3. Provides assistance and leads technical staff for geodetic control and survey workload related to highway construction and the Public Land Survey System perpetuation for the Division.
- 4. Provides assistance and leads technical staff as to proper surveying procedures and methods to deliver efficient and successful survey projects.





- 5. Responsible for survey data management, analysis and interpretation for the Division.
- 6. May be the lead preparer of right of way plats and other highly technical drawings of surveying projects using CADD software (AutoCAD/MicroStation) or GIS Software (ESRI ArcMap).
- 7. Perform intricate mapping and analysis of land descriptions and tax parcels.
- 8. Works closely with contractors, the public and other public agencies and acts as the County Surveyor's authorized representative in the field.
- 9. Provide assistance, training, advice and guidance to technical staff in advanced and complex land surveying principles, procedures, accepted industry standards and best management practices.
- 10. Perform detailed mapping updates of all County tax system parcels as more accurate survey data becomes available.
- 11. Acts as main technical support for County Surveyor.
- 12. Works with computer related items such as the Internet, Microsoft Office programs, ESRI GIS software, Trimble Business Center, Trimble Access, AutoCAD Civil 3D and other software as needed or instructed.
- 13. Prepare and/or assist with reports on projects.
- 14. Provide training and work direction to seasonal interns.
- 15. Inspection and field collection of the location and attributes of the assets maintained by Aitkin County.
- 16. Work with the County Surveyor to build and maintain a strong Division team environment and effective working relationships with other public officials, staff and the general public. The employee is responsible for maintaining a safe environment for self and others and is accountable for such as described in the Aitkin County Personnel Policy. Regular attendance is essential to the maintenance of a smooth and consistent workflow of the employee's responsibilities and the functions of the department as a whole
- 17. Attends certification classes, trainings and meetings for the highly specialized programs including, but not limited to State of Minnesota surveying statutes, methodology and technical certification as needed and all required advanced knowledge and skill to ensure the successful achievement of Division objectives.
- 10.18. Recommends purchase of equipment and supplies needed.
- Performs other related duties as assigned or apparent-that are reasonably related to this position and qualifications. In emergency situations, duties which might not be reasonably assigned to an employee's position may have to be assigned.

Minimum QualificationsCivil Technology not Civil Engineering

AAS degree or equivalent Degree in Land Surveying, plus three or more Civil Technology, or related field and a minimum of five (5) years related land survey and progressive work experience with a Governmental agency or private consulting firm. No automatic increase....include language about demonstrated performance, budget, and dept head approval





<u>High School Diploma/GED and a minimum of ten (10) years related and progressive work experience with a survey agency or private consulting firm.</u>

Valid Minnesota driver's license required. Employment reference checks, a criminal background check, and pre-employment physical will be performed as part of the pre-employment process.

Knowledge, Skills, and Abilities Required

Knowledge of:

- 1. County and departmental policies, procedures, and practices.
- 2. State and local laws, rules, and regulations relevant to the work performed in this position, including legal aspects of land surveying and boundary control as established both by common and statute law.
- 3. Thorough knowledge of <u>principles and practices of land surveying principles, methods and standards including the U.S. public land survey system.</u>
- 4. Knowledge of the principles of geodetic surveying and global positioning systems
- 5. Principles and standards used in the preparation and interpretation of land descriptions and subdivision plats.
- 6. Proper field procedures/quality control methodology to ensure data integrity and accuracy.
- 4.7. Thorough knowledge of mathematics, trigonometry, geometry and an understanding of physics as it applies to land surveying.
- <u>5.8.</u> Thorough knowledge and understanding of state, county and local subdivision regulations.
- 9. Knowledge of effective data research procedures.
- 6.10. OSHA safety standards and regulations.
- 7.11. General office work such as filing and recording information.

Skill in:

- 1. WrittenStrong written and oral communication skills sufficient to communicate the policies and procedures of the department to land owners landowners and the general public.
- 2. Strong problem solvingwritten and eritical thinkingverbal communication skills to explain complex land title problems and how they originated.
- 3. Ability to solve practical problems and deal with a variety of difficult situations where only limited standardization exists. Ability to interpret a variety of instructions furnished in written, oral, diagrams or schedule forms. Ability to use independent judgment to analyze a variety of changing conditions and then determine the course of action necessary to continue
- 3.4. Operating global positioning systems and software packages such as AutoCad, Generic Cad, Starnt, AreviewAutoCAD Civil 3D, ArcView and Arcinfo, Trimble Business Center and total stations and their related accessories.
- 4.5. Proficient Expert GPS and compass orienteering.
- 5.6. Reading, writing, and speaking English proficiently.
- 6.7. Effectively organizing and prioritizing workload.

Ability to:





- 1. Present a positive attitude in the workplace, promote a spirit of teamwork and cooperation, and be able to treat co-workers, supervisors, and subordinates with respect, honesty, and consideration.
- 2. ReadAbility to apply surveying knowledge and understand legal descriptionsskill to complex and several different typesspecific surveying problems and situations
- 3. Ability to communicate technical information in a non-technical manner to other county staff or the general public
- 4. Ability to balance project requirements with numerous and often competing needs.
- 2.5. Ability to work as part of mapsa project management team to keep a project on budget and schedule and within the approved scope of work within the project charter.
- 3.6. Stay current and adapt to constantly changing <u>complicated</u> equipment in the land surveying profession.
- 4.7. Read-and, write detailed and interpret complicated real estate descriptions.
- 5.8. Establish lost corners when there are various options available.
- 6.9. Safely operate chainsaws, brush axes, ATVs, snowmobiles and pickup trucks.
- 7.10. Work in all types of weather and conditions
- <u>8.11.</u> Physically traverse <u>topography</u> in treacherous conditions.
- 9.12. Communicate <u>effectively</u> with <u>land ownerslandowners</u> and the public using good judgment, integrity, and tact.
- 13. Ability to deal with upset citizens and maintain composure when dealing with hostile individuals
- 10.14. Demonstrate a high degree of self-motivation and the ability to work independently
- 44.15. Endure hazardous insectinsects, animals, traffic, and plants.
- 12.16. Maintain accurate daily logs.
- 13.17. Motivate and direct assigned staff as they work.

Language Skills

IntermediateHigh Skills - Ability to read and interpret technical documents such as safety rules, operating and maintenance instructions, and procedure manuals. Ability to write technical reports and correspondence. Ability to speak effectively before groups of customers or employees of the organization.

Mathematical Skills

Ability to add, subtract, multiply, and divide in all units of measure, using whole numbers, common fractions, and decimals. Ability to compute rate, ratio, and percent and to draw and interpret bar graphs. Ability to calculate figures and amounts such as discounts, interest, commissions, proportions, percentages, area, circumference, and volume. Ability to apply concepts of basic algebra and geometry. Ability to work with mathematical concepts such as probability and statistical inference, and fundamentals of plane and solid geometry and trigonometry. Ability to apply concepts such as fractions, percentages, ratios, and proportions to practical situations. Ability to apply advanced mathematical concepts such as exponents, logarithms, quadratic equations, and permutations. Ability to apply mathematical operations to such tasks as frequency distribution, determination of test reliability and validity, analysis of variance, correlation techniques, sampling theory, and factor analysis.





Reasoning Skills

<u>Very</u> High Skills – Ability to solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists. Ability to interpret a variety of instructions furnished in written, oral, diagram, or schedule form.

Computer Skills

To perform this job successfully, an individual shouldshall be proficient at using the following software.

County Payroll Software, E-time, Webfusion, Microsoft Word, Excel, Outlook, AutoCad, Generic Cad, Starnt, Areview, ArcinfoAutoCAD Civil 3-D, ArcView, Arcinfo, Trimble Business Center, Trimble Access and other job-related software.

Ability to Travel

Daily travel required, approximately 100 miles per day on highways and forest roads.

Competencies

To perform the job successfully, an individual should consistently demonstrate the following competencies (definitions attached or available upon request):

Ethics, attendance/punctuality, safety and security, dependability, analytical, problem solving, technical skills, customer service, interpersonal skills, oral communication, written communication, teamwork, leadership, quality management, cost consciousness, diversity, organizational support, judgment, motivation, planning/organizing, professionalism, quality, quantity, adaptability, and initiative.

Work Environment

The noise level in the work environment is usually moderate.

Works primarily outside and is exposed to very hot summer and extreme cold winter temperatures, depending on the weather. Hazardous terrain must be negotiated while transporting moderate to heavy loads. Exposure to industrial accidents caused by vehicles and sharp cutting tools, as well as environmental hazards such as animals, wood ticks, biting and stinging insects, poison ivy and other noxious plants. Remote work areas susceptible to illegal activities. Fumes from welding and petroleum products along with hearing protection required for several activities. One other hazard is people who perceive they are being cheated or deprived of some aspect of their land or ownership rights may become offensive/verbally/aggressive or violent.

Equipment and Tools

Surveying equipment - transit, total station, GPS sensors and receivers, <u>RTK Bridge</u>, computer, copier, fax, telephone, printer, and county-owned vehicles, trailers, snowmobiles, ATVs, snowshoes, chainsaws, brush axe, axe, hatchet, shovel and metal detector.





Physical Activities/Requirements

Climbing, balancing, stooping, kneeling, crouching, reaching, standing, walking, pushing, pulling, lifting, carrying, use of fingers, grasping, talking, hearing, seeing, and repetitive motions. Must have the ability to lift and/or carry up to 5070 pounds on a regular basis.

While performing the duties of this job, the employee performs medium work, exerting up to 5070 pounds of force occasionally, and/or up to 20 pounds of force frequently, and/or up to 10 pounds of force constantly to move objects. Position requires walking long distances in sometimes while carrying work related equipment in frequently difficult terrain.

Working safely is a condition of employment. Aitkin County is a drug-free and alcohol-free workplace.

Disclaimer

The above statements are intended to describe the general nature and level of the work being performed by employees assigned to this job classification. This is not an exhaustive list of all duties and responsibilities. Aitkin County reserves the right to amend and change responsibilities to meet organizational needs as necessary. This job description does not constitute an employment agreement between the employer and employee.

Reasonable Accommodation Notice

The County is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act, the County will provide reasonable accommodations to qualified individuals with disabilities and encourages both prospective and current employees to discuss potential accommodations with the employer.

05/13/2014

Our Vision: We strive to be a county of safe, vibrant communities that place value on good stewardship of local resources.

Our Mission: Aitkin County's mission is to provide outstanding service in a fiscally responsible manner through innovation and collaboration with respect for all.

Our Core Values: Collaboration, Innovation, Integrity, People-Focused, Professionalism