

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
Public Employees Local 71 (LTC)
REQUEST FOR REFERRAL

DIVISION: Southcoast Region, Design & Engineering Services		PCN: 25-2384 & 25-2385 (Position Description Attached)	
JOB CLASS/TITLE: Survey, Journey		WHEN POSITION IS NEEDED: ASAP	
FLEXIBLY STAFFED: <input type="checkbox"/> YES / <input checked="" type="checkbox"/> NO		LTC Schedule Interview? : <input checked="" type="checkbox"/> YES / <input type="checkbox"/> NO	
WAGE GRADE: 54 / \$22.16		DUTY STATION: Juneau	
<input type="checkbox"/>	Permanent Full-Time	<input checked="" type="checkbox"/>	Permanent Full-Time Seasonal
<input type="checkbox"/>	Permanent Part-Time	<input type="checkbox"/>	Permanent Part-Time Seasonal
<input type="checkbox"/>	Non-Perm Full-Time	<input type="checkbox"/>	Non-Perm Part-Time

FIREARMS REQUIRED: <input checked="" type="checkbox"/> YES / <input type="checkbox"/> NO	WORK SCHEDULE: M-F; 40 per week
	TRAVEL REQUIRED: <input checked="" type="checkbox"/> YES / <input type="checkbox"/> NO

COMMENTS/SPECIAL REQUIREMENTS:
Must have a valid Alaska Driver's License.

CANDIDATE MUST BRING TO INTERVIEW:

- Completed Workplace Alaska Application (if not already submitted to the hiring manager by Local 71)
- Completed Certification of Employment as a Commercial Motor Vehicle Operator 10-year history form
- Criminal Convictions: Must provide a copy of the judgement from the Court for any Felony Conviction (regardless of date) and any Misdemeanor Conviction within the last 5 years. For positions requiring APSIN* clearance, must provide judgement for all convictions regardless of date.
- Copy of certifications and licenses
- Other:

Note: Candidates who do not bring the required information to the interview may be rejected.

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2. Duties

2.1. In one or two sentences, state the main purpose of the position.

As part of a two or three-person survey crew, this position exists to aid in collecting land survey field data that will be used by the Environmental, Geotech, Maintenance, Pre-Design and Engineer, and Construction Units within the Department. This person must possess intermediate to advanced land surveying knowledge, skills and experience, and should be capable of managing and directing the survey field crew when absent supervision by a Survey Lead (Party Chief). Arms and Ammo are for protection while working in the field.

2.2. Starting from the most to the least important, list the functional areas assigned to the position. Within each functional area, describe the duty statement associated; estimate the percentage of time spent performing the duties; and define each area as essential (E) or marginal (M).

Functional Area Title: Tasks and Primary Field Duties		
E/M	% of Time	Duty Statement
E	50 %	The incumbent's main task is to operate survey equipment in a competently and adroitly to insure that the necessary field data is collected in an efficient and error free manner. The person must be familiar with setting up and operating conventional theodolites (transit), GPS base and rover units, levels, tripods, bipods, targets, tribrachs, fathometers, computers and data collectors.
E	30 %	When not required or instructed to operate survey instruments, the incumbent is responsible for performing "rod-man" duties, which involves determining where field measurements will be taken, what features will be mapped, and the extent (scope/range) to which topographic details will be collected. As a rodman, the incumbent may also be responsible for the physical tasks involved in setting property corners, control points, monuments, marker stakes and posts. The person will also be required to keep/write survey field notes, and this must be done as neatly, legibly, and thoroughly as possible.

Functional Area Title: Equipment Maintenance and Care		
E/M	% of Time	Duty Statement
E	10 %	This person is responsible for the care, maintenance, upkeep, checking, calibrating and adjusting all survey tools and equipment. Also, he/she must insure that all batteries are charged and maintained so as to not jeopardize field production due to lost time because of battery depletion or failure.

Functional Area Title: Administrative and Clerical Duties		
E/M	% of Time	Duty Statement

E	8 %	<p>The incumbent is responsible for checking, editing and correcting notes and raw data as garnered from field surveying.</p> <p>Also, he/she must make copies of all field notes and raw data for use when checking and editing electronic data, and for placing in appropriate project folders.</p> <p>The field books must be labeled and entered in the field book log as required.</p> <p>The person is to keep timely and accurate track of hours worked, and submit a complete and accurate time sheet as is required by pay period deadlines.</p> <p>Keeping accurate and timely vehicle mileage usage logs is also a requisite of this position.</p>
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Functional Area Title: Computations and Math Skills		
E/M	% of Time	Duty Statement
E	2 %	<p>Absent guidance and supervision of a Survey Lead, and with the aid of data collector, calculator or computer the person must be able to compute stake-out points, offsets, points along a line, alignments and resections.</p> <p>The person should be able to compute raw closure of field traverse data in order to determine accuracy of survey points set and/or measured.</p>

Percentage Total: 100%

3. Other Work Details

3.1. List the computer software and hardware used to perform the duties described. Estimate how often each is used (e.g. daily, 2-3 times a week, 1-2 times a month, etc.).

Dell Dimension Lap Computer; use = daily
TDS Survey Pro Survey Software; use = 3-4 times/week
Leica Geo Office Software; use = 2-3 times/week
Microsoft Excel Software; use = 2-3 times/week
Microsoft Office Software; use = 1-2 times/week
Textpad Software; use = 2-3 times/week

3.2. List the equipment and materials used to perform the duties described, including machinery, tools, instruments, vehicles, etc. Estimate how often each is used (e.g. daily, 2-3 times a week, 1-2 times a month, etc.).

Leica TCRA 1101 Electronic Theodolite (Total Station); use = 3 times/week
Leica Series 1200 GPS Base and Rover Units; use = 2-3 times/week
Leica DNA 10 Electronic Level; use = 3-4 times/year
Leica NA-2 Level; use = 1-2 times/year
HP 48 handheld calculator; use = 2-3 times/month
Chevrolet Express Passenger Van; use = daily
Tripods, targets, prism poles, and backsight set-up; use = 3-4 times/week
Various hand tools (sledge, hack-saw, machete, chain saw, hammer drill); use = 4 times/month.
Shotgun/Ammunition (as necessary)
North River 20' boat; use = 4-5 times/year

3.3. List the guides and references regularly used to perform the duties described. Examples include federal and state laws and regulations, professional standards, building codes, trade practices, contracts, and policy and procedure manuals. Explain how and why these guides and references are used. Estimate how often each is used (e.g. daily, 2-3 times a week, 1-2 times a month, etc.).

State of Alaska Department of Transportation and Public Facilities, SE Region, Survey Manual; gives specific guidelines, examples and instruction on methods, procedures, and tasks required of the SE Region Field Survey Crew; used approximately 2-3 times/year.

Bureau of Land Management, Manual of Instructions For The Survey Of The Public Lands Of The United States; provides detailed description of the Rectangular Survey System as applies to lands of the United States, and gives instruction on how to survey/re-survey these lands; referenced approximately 2-3 times/year.

Master Agreement (union contract) between the State of Alaska and the Public Employees Local 71

representing the Labor, Trades and Crafts (LTC) Unit; the document provides all information about work hours, leave, travel, etc. rules, policy and procedure (excluding health care specifics) as has been agreed to between the State and Local 71; referenced approximately 20 times/year.

Federal Highway Administration`s Manual on Uniform Traffic Control Devices for Street and Highways; provides detailed instruction on how to correctly (legally) sign and delineate work zones, and control traffic (motorized and pedestrian) passing into or around the work zone; used 4-5 times/year.

3.4. Describe the level of authority and independence the incumbent of the position exercises. List the actions the incumbent takes or the decisions the incumbent makes on a regular basis without obtaining prior approval from a higher level employee. For example, explain how the position has the authority to commit the organization, or any parts thereof, to a course of action.

When performing as rodman, the incumbent makes command decisions as to the precise location where individual topographic points will be measured. Such discretion determines what features will be shown and/or excluded from the map, and the relative level of detail of the contours that will be generated from the field data (points). This discretion does not commit, but rather provides the Department a general level of accuracy and precision of the features and details of the site/area being mapped/measured. If greater detail is required, then the crew may have to revisit the assignment in order to collect more data.

3.5. Describe the nature of the contacts the incumbent has with other people in order to perform the duties described. Include who is contacted, the reason for the contact, and how often the contact is made.

The person must interact with the other field crew members on a daily basis. The crew must function as a whole and cohesive unit, so communication and constant contact is essential and imperative.

He/she occasionally (1-2 times/month) is required to consult with the Survey Technician (PCN 252320) in order to obtain instruction, guidance and/or clarification concerning specifics of survey field assignment.

The incumbent needs to interact with administrative staff on approximately a weekly basis to relate details (paperwork) concerning travel (air, ferry, accomodations, receipts) logistics.

3.6. Describe the consequence of an error made by a prudent employee in the performance of the essential functions assigned to the position. What is the consequence of that error to individuals, operations, and programs?

The most common error made by the incumbent in this position is one involving incorrect reading, input, or relaying of the rod or tripod height given for specific topographic measurements or control/property points set or mapped. The consequence of such an error manifests itself in an incorrect (not representative of actual ground) contour map involving the point or area in which the error applies. Such an error, if not identified and corrected, could lead to faulty civil design and/or incorrect quantity computations for cuts and/or fill situations.

3.7. List critical requirements of the position not previously described (e.g., skills in keyboarding, writing, negotiating, communications, etc.).

The person needs to be intimate with the set-up and operation of the survey total station and GPS units. This means knowing how to set parameters, check, calibrate, adjust both soft and hardware, and also navigate through the software menus on the instruments.

The incumbent should have competent knowledge of the concepts associated with coordinate geometry (COGO) as relates to land surveying and point computation.

3.8. List licenses, certifications, registrations, physical or other standards required by state or federal law or regulation to perform the duties described. Cite the specific authority (e.g. law or regulation, such as the OSHA Bloodborne Pathogens Act).

Valid Alaska driver`s license.

4. Work Demands

The following identifies some of the physical and mental demands and potential hazards typically encountered by this position. These are job demands which can be ***reasonably anticipated and are an expectation of the job***.

Keeping in mind the essential functional areas and duty statements described in section 2, select the rating that best matches the requirement of this position according to the following descriptions:

Rating **Description**

Not Required (N): Not required of this position.

Present (P): Requirement **is** present, but **is not** essential to the position. (For example, a receptionist may encounter aggressive or angry people, but this is not an essential assignment.)

Occasional (O): Required 33 percent of the time or less **and** essential to the position. (For example, a lifeguard swims only occasionally, but it is essential that a lifeguard be able to swim; a correctional officer must control aggressive/angry people who are life threatening.)

Frequent (F): Required over 33 percent of the time **and** essential to the position.

Items checked below must be consistent with the duty statements listed in section 2.

4.1 Physical Requirements

Title	Rating			
	N	P	O	F
Sitting				F
Walking				F
Standing				F
Running		P		
Jumping		P		
Bending or twisting				F
Squatting or kneeling			O	
Crawling		P		
Reaching above shoulder level			O	
Reaching below shoulder level			O	
Ascending or descending using a ladder or other conveyance		P		
Climbing stairs		P		
Driving cars, light duty trucks				F
Driving heavy duty vehicles	N			
Using floor mounted foot controls to operate equipment (e.g., not driving a car)	N			
Repetitive motion of hands/fingers (e.g., keyboarding, turning pages)				F
Fine manipulation with fingers			O	
Pinching with fingers			O	
Grasping with hand, gripping				F
Load, unload, aim, and fire handguns, shotguns or other firearms		P		

Lifting/carrying up to 25 pounds				F
Lifting/carrying 26-50 pounds			O	
Lifting/carrying more than 50 pounds		P		
Pushing/pulling up to 25 pounds		P		
Pushing/pulling 26-50 pounds		P		
Pushing/pulling more than 50 pounds		P		
Balancing on moving surfaces		P		
Balancing on narrow surfaces		P		
Balancing on slippery surfaces		P		
Balancing on uneven surfaces		P		
Restraining/grappling with people in a public protection environment	N			
Seeing objects at a distance				F
Seeing objects peripherally				F
Using depth perception				F
Seeing close work (e.g., typed print)			O	
Distinguishing colors				F
Hearing conversations or sounds				F
Hearing via radio or telephone				F
Communicating through speech				F
Communicating by writing/reading			O	
Distinguishing odors by smell	N			
Distinguishing tastes	N			

4.2 Work Environment

Title	Rating			
	N	P	O	F
Work in/exposure to inclement weather				F
Work in/exposure to cold water		P		
Work/live in remote field sites				F
Work in confined areas (under desks, in heating vents, etc.)		P		
Exposure to dust, chemicals, or fumes	N			
Exposure to hazardous equipment (e.g., guns, chainsaws, explosives)			O	
Exposure to electrical current (not outlets)		P		
Swimming/scuba diving	N			
Work at heights up to 25 feet (e.g., towers, poles)		P		
Work at heights over 25 feet (e.g., towers, poles)		P		
Work in urban or highway traffic (other than driving)				F
Work around moving machinery or mobile equipment		P		
Work around moving mechanical parts		P		
Work on and off moving equipment	N			
Work on slippery or uneven surfaces				F
Work/travel in boat/small aircraft/helicopters			O	

Exposure to high noise levels			O	
Exposure to infection, germs, or contagious diseases (e.g., hospital, lab, clinic, etc.)	N			
Exposure to blood, body fluid, or materials potentially contaminated by blood or body fluids (e.g., hospital, lab, clinic, public protection environment)	N			
Exposure to needles or sharp implements (e.g., hospital, kitchens)	N			
Use of hot equipment (e.g., kitchen ovens, lab equipment)	N			
Exposure to wild/dangerous animals		P		
Exposure to insect bites or stings			O	
Exposure to aggressive/angry people in a public protection environment	N			

4.3 Other Work Demands

Title	Rating			
	N	P	O	F
There are no other work demands.				

4.4. Explain any special physical, mental, or behavioral requirements of the position that have not already been addressed.

None