

## UTAH COUNTY JOB DESCRIPTION

CLASS TITLE: FIBER OPTICS AND CABLING SPECIALIST  
CLASS CODE: 3114  
EFFECTIVE DATE: 11/01/05  
MARKET POINT: Based on applicable market study  
  
DEPARTMENT: Public Works

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### **JOB SUMMARY**

Installs, maintains, updates, and repairs Utah County's telecommunication cabling infrastructure.

### **CLASS CHARACTERISTICS**

This is the senior level technical position responsible for cabling infrastructure and telecommunication system support.

### **ESSENTIAL FUNCTIONS**

Assists with design, creation, and implementation of standards and specifications for the cabling infrastructure of all County facilities and outside plant telecommunications cabling.

Designs and develops improvements for the cabling infrastructure throughout the county and within all facilities.

Maintains all documentation of the cabling infrastructure including schematics and layouts of the network as well as test documentation and usage of all circuits.

Installs cabling throughout the network and makes all appropriate terminations and splices.

Supervises and directs cabling projects as directed by the Division Manager. Inspects and monitors the progress of larger projects performed by outside contractors to ensure compliance with County standards and specifications.

Ensures that all cable location requests (Blue Stakes) are carried out and completed promptly and accurately.

In coordination with the Division Manager, requisitions and purchases necessary materials, equipment, parts, and supplies. Assists with preparation of bids, and attend meetings with vendors to discuss projects and upcoming bids.

Attends meetings with other agencies to discuss ongoing work projects, and conducts weekly meetings with division to discuss current projects, assign jobs, follow up on tasks, etc.

Attends seminars, conventions, & training classes to stay up to date with the latest technologies, innovations and industry trends.

Performs testing and troubleshooting of the network to ensure that it meets performance specifications. Makes any repairs needed to maintain system reliability.

Assists with design and implementation of new systems and system upgrades. Provides ideas for system improvement.

Assists with telephone system moves and changes, radio equipment installations, mountain top transmitter site work, dispatch and E-911 equipment maintenance, and other duties as assigned.

### **KNOWLEDGE, SKILLS, AND ABILITIES**

Ability to maintain cooperative working relationships with those contacted in the course of work activities; Skill in reading, writing, and basic math; Skill in soldering and component repair; Skill in analytic problem solving;

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Skill in interpersonal communication; Ability to identify and resolve problems on a systems level; Ability to design and implement new systems, systems upgrades, and ideas for system improvement; Skill in word processing and basic computer programs; Knowledge of testing equipment including optical power meter, OTDR, and fusion splicer; Knowledge of telecommunications equipment, design, structure, and function; Skill in mechanical and welding practices; Knowledge of grounding, bonding, and electrical protection principles; Knowledge of principles of aerial plant, underground, and buried cable construction and installation; Knowledge of in-building and campus backbone cabling systems, telecommunication service entrance and termination, fire stopping techniques, and cable preparation; Knowledge of cable termination techniques for twisted pair, coaxial, and optical fiber; Knowledge of operation and safety principles associated with aerial lifts; Ability to discern and differentiate the colors of the standard telecommunications color code.

### **PHYSICAL DEMANDS**

Regularly walk, stand, or stoop; Occasionally lift, carry, push, pull or otherwise move objects weighing up to 100 pounds; Frequently lift, carry, push, pull or otherwise move objects weighing up to 60 pounds; Ascend or descend ladders, scaffolding, ramps, poles, high towers, and the like; Use tools or equipment requiring a high degree of dexterity; Walk, stand, crouch, or run on narrow, slippery, or erratically moving surfaces; Regularly drive a motor vehicle; Work for sustained periods of time maintaining concentrated attention to detail; Need to distinguish between shades of color; and Communicate via radios.

Accommodation may be made for some of these physical demands for otherwise qualified individuals who require and request such accommodation.

### **WORKING CONDITIONS**

Work is regularly performed in environmentally controlled and partially environmentally controlled rooms; Work is regularly performed in a very noisy place; Work occasionally exposes incumbent to conditions such as fumes, noxious odors, dusts, mists, gases, poor ventilation and hazardous chemicals; Work occasionally exposes incumbent to possible bodily injury from moving mechanical parts of equipment, tools, or machinery; Work is performed for sustained periods outdoors and occasionally in hot, cold, or inclement weather; Work requires the use of protective devices such as masks, goggles, and gloves; Work occasionally exposes incumbent to possible bodily injury from exposure to high-power radio frequency emissions; Work frequently exposes incumbent to possible bodily injury from exposure to high power light sources and invisible laser radiation; Work occasionally exposes incumbent to possible bodily injury from electrocution hazard when working near power lines; and Work potentially exposes incumbent to unknown and dangerous conditions.

### **EDUCATION AND EXPERIENCE**

Equivalent to an Associates Degree in Electronics or closely related field, and six (6) years work experience performing telecommunications installation and maintenance activities.

### **LICENSING**

Incumbent must possess a valid State of Utah drivers license; must have current BICSI, ETA, or equivalent certification, or must obtain certification within six months of employment. Incumbent must maintain certification throughout employment.

This description lists the major duties and requirements of the job and is not all-inclusive. Incumbent(s) may be expected to perform job-related duties other than those contained in this document and may be required to have specific job-related knowledge and skills.