

Network Infrastructure Design Manager

Position Details

Class Code: 1570

Job Family: Information Systems

Classification: Support Professional

Terms of Employment: [Pay Grade 64 on the Support Professional Salary Schedule](#)

FLSA STATUS: NON-EXEMPT

Position Summary

Under direction, responsible for the design and implementation of networking infrastructure systems (e.g., data, telephone, wireless networking, clock-intercom) for new and existing Clark County School District (CCSD) facilities.

Essential Duties and Responsibilities

This list of Essential Duties and Responsibilities is not exhaustive and may be supplemented.

1. Assigns, supervises, and evaluates assigned staff.
2. Coordinates resources assigned to network infrastructure design projects from analysis through implementation.
3. Develops standard designs, construction specifications, and requirements as they relate to low-voltage data/telephone communications infrastructure systems, equipment, spaces, and pathways.
4. Oversees design review, research, and development of network communications infrastructure technologies and processes related to building construction.
5. Coordinates network technology infrastructure design and activities, including design review, design consulting, construction compliance, quality assurance,

- site acceptance, and post-construction services with other units and CCSD departments, technology service providers, building architects, electrical engineers, and low-voltage systems installers.
6. Recommends network infrastructure upgrades based on performance standards.
 7. Assists Networking Services administrators and unit managers in the design and implementation of networking technology standards.
 8. Supplies input into goals, objectives, and budget development for the Networking Services department.
 9. Assists in the development of disaster recovery plans for network infrastructure.
 10. Designs changes/additions to existing network infrastructure for site-funded technology projects.
 11. Monitors and prepares required reports throughout the implementation of projects.
 12. Researches and directs the research of low-voltage equipment needs to ensure a sustainable network infrastructure.
 13. Oversees network infrastructure design staff and contracted personnel.
 14. Surveys and evaluates network schematics and design to ensure consistent communications are available districtwide.
 15. Monitors the design, evaluation, and management of the engineering and monitoring of the network wide-area network (WAN)/local area network (LAN) communications infrastructure.
 16. Conforms to network security standards, as prescribed.
 17. Supplies 2nd and 3rd level design and site compliance support.
 18. Conforms to safety standards, as prescribed.
 19. Performs other tasks related to the position, as assigned.
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Distinguishing Characteristics

Involves designing and implementing network infrastructure systems for new and existing CCSD facilities, supporting the performance of various functions of Networking Services, and supervising a staff of design engineers and technicians.

Knowledge, Skills, and Abilities (Position Expectations)

1. Knowledge of low-voltage data communications infrastructure specifications and requirements.
2. Knowledge of construction processes and activities.
3. Knowledge of cabling, termination, installation, troubleshooting, and repair, including CAT5, CAT6, and CAT6A technologies.
4. Knowledge of fiber optic cabling, termination, installation, and repair, including single mode and multi-mode.
5. Knowledge of national and local building codes (e.g., National Electrical Code (NEC), International Building Code (IBC), Institute of Electrical and Electronics Engineering-National Electrical Safety Code [IEEE-NESC]), Telecommunications Industry Association (TIA) standards, and Building Industry Consulting Service International (BICSI) best practices as they relate to low-voltage data communications designs, specifications, testing, and installations.
6. Ability to review, understand, and critique construction plans, requirements, product submittals, shop drawings, etc.
7. Ability to explain complex technical processes and procedures in easy-to-understand terminology.
8. Ability to plan complex network communications activities.
9. Ability to supervise and evaluate employees.
10. Ability to prepare complex reports and graphics.
11. Ability to read and interpret complex technical documentation.
12. Ability to create, edit, and support technical documentation.
13. Ability to develop detailed network equipment specifications and requirements.
14. Ability to keep current knowledge of network infrastructure technology techniques and practices.
15. Ability to plan and organize work.
16. Ability to coordinate multiple projects and meet predetermined deadlines.
17. Ability to read and interpret complex materials.
18. Ability to analyze specifications of network technology infrastructure equipment and components.
19. Ability to make technical presentations to CCSD staff and administrators.
20. Ability to develop detailed network equipment specifications and requirements.
21. Ability to maintain current knowledge of network infrastructure technology techniques and practices.
22. Ability to work flexible hours and shifts.
23. Ability to work cooperatively with employees, departments, vendors, and the public.
24. Ability to exercise judgment with established procedural guidelines.
25. Ability to recognize and report hazards and apply safe work methods.

26. Possess physical and mental stamina commensurate with the responsibilities of the position.
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Position Requirements

Education, Training, and Experience

1. High school graduation or other equivalent (General Educational Development (GED), foreign equivalency, etc.).
2. Bachelor of Science degree in computer science, networking, Internet communications, electrical engineering, construction management, or related fields; or,
Two (2) years of college (60 college credits) with a focus in computer science, networking, Internet communications, electrical engineering, construction management, or related fields; plus, two (2) years of work experience in progressively detailed technical support activities directly related to network infrastructure or networking technology fields; or,
Four (4) years of work experience in progressively detailed technical support activities directly related to network infrastructure or networking technology fields.
3. An additional four (4) years of experience in progressively detailed technical support activities directly related to network infrastructure or networking technology fields.

Licenses and Certifications

1. A valid driver's license that allows the applicant/employee to legally operate a motor vehicle in Nevada. License must be maintained for duration of the assignment.
2. Copy of current driving history (dated within six (6) months from the date printed) issued by the Department of Motor Vehicles (DMV) at the time of application or Qualified Selection Pool (QSP) placement and at time of interview prior to final selection.
3. Safe driving record must be maintained for the duration of the assignment.
4. Industry standard certifications in networking communications are desired.

Preferred Qualifications

1. Supervisory experience.
2. Industry certification in the area of low-voltage, data communications infrastructure design such as BICSI Registered Communications Distribution

- Designer (RCDD), BICSI Registered Technology Project Manager (RTPM), or Project Management Institute (PMI) Project Management Professional (PMP).
3. Experience leading large and complex network-related technology design and construction projects.
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Document(s) Required at Time of Application

1. High school transcript or other equivalent (GED, foreign equivalency, etc.).
 2. College transcript(s) from an accredited college or university, if applicable.
 3. A valid driver's license that allows the applicant/employee to legally operate a motor vehicle in Nevada.
 4. Copy of current driving history (dated within six (6) months from the date printed) issued by the DMV.
 5. Safe driving record.
 6. Specific documented evidence of training and experience to satisfy qualifications.
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Examples of Assigned Work Areas

CCSD Networking Services department, and travel to and from schools and other district office settings and construction sites.

Work Environment

Strength

Medium/heavy - Exert force 50-100 lbs., occasionally; 25-50 lbs., frequently; or 10-20 lbs., constantly.

Physical Demand

Frequent sitting, standing, walking, pushing, pulling, stopping, kneeling, climbing, crouching, reaching, handling, and repetitive fine motor activities. Mobility to work in a typical office setting and use standard office equipment. Stamina to remain seated and maintain concentration for an extended period of time. Hearing and speech to communicate in person, via video conference and computers, or over the telephone. Vision: Frequent near and far acuity, and color vision. Vision to read printed and online materials, a Video Display Terminal (VDT) screen, or other monitoring devices.

Environmental Conditions

Climate-controlled office setting with temperatures ranging from mild/moderate to extreme cold/heat. Exposure to noise levels ranging from moderate to loud for occasional to frequent time periods.

Hazards

Furniture, office equipment, communicable diseases, chemicals, and fumes (as related to specific assignment), and power/hand-operated equipment and machinery (as related to specific assignment).

Examples of Equipment/Supplies Used to Perform Tasks

Various computers, printers, modems, telephones, fax machines, copy machines, digital multi-meters, data system and communication test equipment, hand and power tools, etc.

AA/EOE Statement

The Clark County School District is proud to be an equal opportunity employer. The Clark County School District is committed to providing all applicants and employees equal employment opportunities without regard to race, color, religion, sex, gender identity or expression, sexual orientation, national origin, genetics, disability, age, military status, or other characteristics protected by applicable law. Here at Clark County School District, we are a diverse group of people who honor the differences that drive innovative solutions to meet the needs of our students and employees. We believe that through a culture of inclusivity, we have the power to reflect the community we serve.

Job Revision Information

- Created: 10/13/23