

# Infrared Thermographer (Electrical)

## Position Details

Class Code: 7011

Job Family: Skilled Trades/Technicians

Classification: Support Professional

Terms of Employment: [Pay Grade 56 on the Support Professional Salary Schedule](#)

FLSA STATUS: NON-EXEMPT

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## Position Summary

Under general supervision, utilizes thermographic technology to diagnose electrical equipment to prevent failures. Plans, installs and repairs wiring, electrical fixtures, apparatuses, control equipment, and other electrical components.

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## Essential Duties and Responsibilities

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

1. Performs complete thermographic surveys of electrical switchgear and components using a thermographic camera, including interpreting and reporting on the images taken via thermography software.
2. Tests and troubleshoots energized systems and repairs motors, controls, overload relays, pressure switches, transformers, generators, emergency power systems, light plants, lighting circuits, fixtures, switches, ground circuits and circuit wiring.
3. Installs switches, relays, circuit breakers, electrical control apparatuses, computer raceways and cables, fiber optic telecommunications wiring, distribution apparatuses, power panels, power distribution cables, buss ducts and other electrical equipment (vocational shop, theater lighting, athletic field security and exterior lighting equipment, etc.).

4. Identify accepted thermal heat parameters for electrical switchgear.
  5. Examines and modifies existing installations to avoid hazardous, unsightly and unreliable wiring or conduit/raceways.
  6. Coordinates work with school activities, other trades, and public utilities.
  7. Inspects and calibrates limit switches, drive motors, and other related electrical equipment.
  8. Inspects new equipment installations performed by contractors and reports performance status to Maintenance supervisors.
  9. Instructs and/or directs the daily activities of Skilled Trades Assistants, when assigned.
  10. Assists Facility Planning in maintaining accurate as-built drawings and records.
  11. Assists the Crane Operator with rigging and placement of equipment.
  12. May perform first aid and/or Cardiopulmonary Resuscitation/Automated External Defibrillator (CPR/AED) as necessary.
  13. Conforms to safety standards, as prescribed.
  14. Performs other tasks related to the position, as assigned.
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## **Distinguishing Characteristics**

Involves preventive maintenance, diagnosing electrical faults, and installing/repairing wiring, fixtures, control equipment, and other electrical components.

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## **Knowledge, Skills, and Abilities (Position Expectations)**

1. Knowledge of electrical lockout-tag out procedures per Occupational Safety and Health Administration (OSHA) guidelines.
2. Knowledge of electrical safety practices and procedures.
3. Knowledge of practices and procedures of electrical trade.
4. Knowledge of first aid, CPR/AED, and Universal Precautions.
5. Ability to troubleshoot electrical systems.
6. Ability to recognize, understand, and interpret local, state, federal, and national codes, including: Universal Building Code (UBC), Uniform Mechanical Code (UMC), Uniform Plumbing Code (UPC), National Fire Protection Association (NFPA), National Electrical Code (NEC), etc.
7. Ability to operate hand and power tools and equipment, including thermographic camera.

8. Ability to work on a computer, including knowledge of thermography reporting software.
  9. Ability to read and interpret blueprints, schematics, specifications, and thermographic reports.
  10. Ability to read and interpret written/verbal instructions.
  11. Ability to meet predetermined deadlines.
  12. Ability to perform strenuous, physical work.
  13. Ability to safely move and relocate heavy objects.
  14. Ability to work flexible work hours/shifts.
  15. Ability to work in confined areas and sustain long periods of bending.
  16. Ability to withstand heights and perform work safely.
  17. Ability to work cooperatively with employees, vendors and the public.
  18. Ability to recognize and report hazards and apply safe work methods.
  19. 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. Completion of apprenticeship as an Electrician or Journeyman Electrician.

**Note:** As part of the selection process, a test for knowledge and skills will be given to all employees/applicants selected for interview.

### 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 the duration of the assignment.
2. 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 the time of interview prior to final selection.
3. Safe driving record. Safe driving record must be maintained for the duration of the assignment.
4. Apprenticeship Card or Journeyman Electrician certificate.

5. Certified Infrared Thermographer Level I. Must be maintained for the duration of the assignment.
6. Current Cardiopulmonary Resuscitation/Automated External Defibrillator (CPR/AED) certificate from the American Heart Association, American Red Cross, or other similar organization. Certification must be maintained for the duration of the assignment. Certification training must be in-person and include a hands-on component. Online courses will not be accepted. A copy of the front and back of the CPR/AED certificate must be uploaded into the application.
7. Current First Aid certificate from the American Heart Association, American Red Cross, or other similar organization. Certification must be maintained for the duration of the assignment. Certification training must be in-person and include a hands-on component. Online courses will not be accepted. A copy of the front and back of the First Aid certificate must be uploaded into the application.

## **Preferred Qualifications**

None specified.

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## **Document(s) Required at Time of Application**

1. High school transcript or other equivalent, (GED, foreign equivalency, etc.).
  2. Copy of a valid driver's license that allows the applicant/employee to legally operate a motor vehicle in Nevada.
  3. Copy of current driving history (dated within six (6) months from the date printed) issued by the DMV.
  4. Safe driving record.
  5. Apprenticeship Card, if applicable.
  6. Journeyman Electrician certificate, if applicable.
  7. Infrared Thermographer - Level I proof of certification.
  8. Current CPR/AED certificate as indicated above. A copy of the front and back of the CPR/AED certificate must be uploaded into the application.
  9. Current First Aid certificate as indicated above. A copy of the front and back of the First Aid certificate must be uploaded into the application.
  10. Specific documented evidence of training and experience to satisfy qualifications.
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## **Examples of Assigned Work Areas**

Clark County School District facilities – offices and schools (classrooms, computer labs, locker rooms, cafeterias, restrooms, building rooftops, etc.).

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## Work Environment

### Strength

Medium/heavy - exert force of 50-100 lbs., occasionally; 25-50 lbs., frequently; 10-25 lbs., constantly.

### Physical Demand

Frequent sitting, standing, walking, pushing, pulling, stooping, kneeling, crouching, reaching, handling, and repetitive fine motor activities. Hearing and speech to communicate in person, via video conference and computers, or over the telephone. 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. Vision: Frequent near and far acuity, depth perception, focal length change, and color vision. Vision to read printed and online materials, Video Display Terminal (VDT) screens, or other monitoring devices.

### Environmental Conditions

Varies from a climate-controlled office setting to work outdoors 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, and frequent electrical shock hazards.

### Hazards

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

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## Examples of Equipment/Supplies Used to Perform Tasks

CCSD -issued/personal vehicle, forklifts and manlifts, pallet jacks, hydraulic crimp tools, thermographic camera, electrical hand tools, electric drill motors and saber saws, vices and pipe vices, pipe threaders, pipe benders, hydraulic knock out punches, wire pulling machines, trailers, safety equipment, lockouts and tags, etc.

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## **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**

- Revised: 04/09/24
- Created: 01/04/07