



## CIVIL ENGINEER TECHNICIAN

Department/Program: Hopi Department of Transportation  
Reports To: HDOT Civil Engineer  
Salary/Hourly Range: 49  
Status: NON-EXEMPT

DRIVER'S LICENSE REQUIRED  
PD Revised: 05/20/2016

### INTRODUCTION:

This position is in the construction section of the Department of Transportation. This position is based on work complexity, difficulty, responsibility, knowledge, skills and abilities required to perform work for the Department of Transportation. Incumbent assists in performing technical and semi-complex civil engineering work in computer aided design drafting, field surveys, construction management and inspection of water/wastewater related projects. The incumbent will on occasion lend assistance to the road maintenance section or other tribal departments in the technical area as the need arises.

### KEY DUTIES AND RESPONSIBILITIES:

(The following examples of duties are intended to be illustrative only and are not intended to be all inclusive or restrictive.)

1. Reviews construction contracts, plans, and specifications and occasionally will perform Project Management, Contracting Representative duties as assigned.
2. Maintains a daily log and advises the Project Manager/Coordinator of contract violations, sub-standard workmanship, improper materials, and other deviations from specifications.
3. Primarily assigned to the construction section engaged in highway engineering and construction management.
4. Assists in conducting field investigations of existing and proposed civil engineering projects such as residential, community, septic systems, water and sewer service lines, roadway improvements, etc., and makes recommendations for improvements to design, operations and/or maintenance.
5. May on occasion attends project meetings with project managers, engineers, technicians and field supervisors. Maintains meeting and project records. Reviews and assists Community Members with resolving complaints and concerns regarding civil engineering projects.
6. Assists in the preparation of standard details, plans and specifications to construct civil engineering projects. Obtains field measurements and performs surveying as needed to draft layout of existing and proposed civil engineering projects.
7. Submits requests for environmental clearances for civil engineering projects and assists in gathering all required data and documentation to make requests for grant reimbursements for applicable projects.
8. Visits residential and commercial construction sites with project managers, engineers and/or technicians to determine conformance to plans and specifications. Examines products and materials used prior to installation to ensure they meet required specification.
9. Assists field supervisors with developing material lists as necessary to complete required projects.
10. Performs other related duties as assigned to meet Department/Program goals & objectives.

### PERSONAL CONTACTS:

Contacts include tribal leaders, other tribal departments, staff, federal, state, and local agencies and organizational groups, environmental groups, members of the public and other tribes and other contractors to the tribe. Other contacts are primarily with other members of the transportation program technicians, construction field staff, road maintenance staff and supervisor. The incumbent must also demonstrate expert skills in communicating with all representatives outside of the tribe to effect cooperation and positive feedback.

### PHYSICAL EFFORT & ENVIRONMENTAL FACTORS:

The work is sedentary in nature but will require waling and bending, lifting of objects, and climbing stairs. Work also requires prolonged periods of sitting and standing and intense concentration for several hours at a time when completing projects under tight deadlines. Field work and site investigations are performed when the need arises which may require walking on uneven or rocky ground. Occasional long hours of work and travel may be required. Extended travel on short notice is required.

Work is performed in all types of weather conditions and is often performed under stressful conditions due to externally imposed work deadlines with mandated overtime as required. Field conditions can vary harsh and include a wide range of conditions from extreme winds, temperatures range from below freezing to extremely hot for extended periods. Incumbent is required to use safety equipment, such as ear devices, hard hats, hard-toed shoes, respirators, and protective clothing.

### MINIMUM QUALIFICATIONS:

1. Required Education, Training and Experience:

Education: Associates Degree in Civil Engineering Technology or related field; AND

Experience: Two (2) years work experience as a full-time technical civil engineer; OR

Any equivalent combination of Education, Training and Experience, which demonstrates the ability to perform the duties of the position.

2. Required Knowledge, Skills and Abilities:

Knowledge:

- Knowledge of civil engineering principles, concepts, methods, techniques, and practices, including design and construction of roads.
- Knowledge of preparation of plans, specifications, cost estimates, schedules, and construction documents for a variety of transportation construction and maintenance projects.
- Knowledge of roadway construction and maintenance materials, methods, techniques, and principles.
- Knowledge of design and construction industry standard contract documents.
- Knowledge of civil engineering programs and projects to achieve community goals and objectives.
- Knowledge of methods and techniques of cost estimation and planning for projects.
- Knowledge of construction design, standards, materials, and construction.
- Knowledge of construction materials, methods, inspection techniques, and survey principles.
- Knowledge of symbols and terminology used in engineering drawings.
- Knowledge of tribal, state, and federal laws and regulations relating to construction activities and environmental issues.

Skills:

- Skill in use of personal computers, including software applications such as Microsoft Windows and Microsoft Office Professional software.
- Skill in civil engineering planning and design, including analysis and evaluation.
- Skill in evaluating transportation facilities, including pavement conditions, plans, feasibility recommendations, specifications, cost estimates, and construction work.
- Skill in establishing and maintaining effective working relationships with consulting engineers, contractors, public officials and representatives of outside agencies and organizations.
- Skill in negotiating terms and conditions of contracts and sensitive agreements.
- Skill in work management and work leadership.

Abilities:

- Ability to apply civil engineering principles, methods, and techniques to planning, construction and maintenance projects.
- Ability to read and effectively interpret civil engineering plans, reports, manuals, specifications, and submittals.
- Ability to determine appropriate methodology for successful completion of projects, including planning, research and contract management.
- Ability to use personal computer and engineering applications in performing duties.
- Ability to effectively and efficiently resolve conflict.
- Ability to communicate effectively both verbally and in writing.
- Ability to lift and carry objects weighing up to 25 pounds.
- Ability to walk, stoop, climb, bend, work in extreme weather conditions, and inspect transportation facilities.

**NECESSARY SPECIAL REQUIREMENTS:**

1. Must possess an Arizona Driver's License and complete/pass the Hopi Tribe's Defensive Driving Course.
2. Must complete and pass the pre-employment screening which includes fingerprint and background investigation in accordance with Hopi Tribal policy.
3. Must not have any felony convictions and must not be on probation.
4. Must not have been convicted of misdemeanors at the local, state or federal level within the past twelve (12) months of application.

**DESIRED REQUIREMENTS:**

1. Knowledge of Tribal Transportation Programs (TTP).