

# HIDALGO COUNTY DEPARTMENT

Precinct No. 2

Job Title: Engineering Technician II FLSA Status: Non-Exempt

Department: 122 Civil Service Status: Exempt

## JOB SUMMARY

Under direction, the Engineering Technician II performs complex responsible sub-professional civil engineering work in support of the department activities; and other related work as required. Supervisor provides occasional instructions; advice, answers questions when necessary, and reviews work occasionally upon completion. A registered professional Engineer or Designer supervises design activity. Employee must have ability to perform effectively with little supervision in various work situations having deviations and irregularities; must be able to interpret engineering field data and incorporate such data into design plans; ability to plan and supervise the work of lower level aides

## ESSENTIAL DUTIES AND RESPONSIBILITIES

- Performs calculations and drafting for design work; includes production of quantity summaries, hydraulic studies, roadway design plans, utility studies, right-of-way maps, traffic control, lighting/signal plans.
- Uses AutoCAD software to prepare & draft engineering plans and profiles; draw charts on statistical data, and update & revise storm, water and base maps and other maps such as beard maps, annexation maps, master atlas and address maps.
- May use Civil/Survey, Earthworks, Design, DTM, COGO, and other interactive graphics design programs.
- Provides information to the public regarding utilities, easements, fences, right-of-way addresses and flood zones.
- Learns additional automated design tools.
- Prepares and drafts engineering plans and profiles, both computerized and free hand.
- May review own work and work done by others in the section for drafting and calculation errors.
- Performs surveys and field work such as inspecting; prepares field notes; designing of presentation maps for other departments
- Works on the reproduction of plans; record keeping of plans. May file and make copies; updates and arranges filing systems.
- Information research for other departments, including utilities, right-of-way, structural, architectural, and mechanical information.
- Writes general notes, specifications, and special provisions.
- May attend specialized design schools.
- May schedule, coordinate and prepare plans and documents for public hearings.
- Ability to work well with others.

## **ESSENTIAL DUTIES AND RESPONSIBILITIES (CONT.)**

Regular attendance is a must.

Performs such other duties as may be assigned.

### **QUALIFICATION REQUIREMENTS**

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. These requirements listed below are representative of the knowledge, skill, and ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. Must have background knowledge of using AUTOCAD software and preparation of design plans. Knowledge of other equipment use includes printers and plotters, calculator, drafting tools, copier, surveying instrument, and measuring equipment. Must also have some background knowledge on Subdivision Rules and Regulations and preparation of Subdivision plans.

### **EDUCATION and/or EXPERIENCE**

High School diploma and an Associate Degree from a Technical Institute, CAD intermediate level certification and 4 years experience in Computer Aided Drafting and Civil Engineering design.

### **CERTIFICATES, LICENSES, REGISTRATIONS**

Employee must have proof of a current valid Texas Motor Vehicle Operators license and current liability insurance.

Must be able to be insured by the County's insurance carrier.

### **OTHER SKILLS AND ABILITIES**

Employee may be assigned other duties in addition to those listed; duties may change according to the changing needs of the County.

### **PHYSICAL DEMANDS**

The Physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is required to sit and talk or hear. The employee is required to stand; walk; use hands to finger, handle or feel objects, tools or controls, reach with hands and arms and stoop or kneel.

The employee must occasionally lift and/or move up to twenty-five (25) pounds. Specific vision abilities required by this job include close vision, distance vision, peripheral vision, depth perception and the ability to adjust focus.

### **WORK ENVIRONMENT**

The work environment characteristics described here are representative of those an employee encounters while accommodations may be made to enable individuals with disabilities to perform the

essential functions.

The noise level in the work environment is usually moderate.

### **SAFETY REQUIREMENTS**

Maintain physical condition appropriate to the performance of assigned duties and responsibilities, which may include the following:

- Sitting for extended periods of time
- Operating assigned equipment.

Maintain mental capacity, which permits:

- Making sound decisions and using good judgment
- Handling financial affairs effectively and honestly
- Maintaining confidentiality
- Demonstrating intellectual capabilities.

Effectively handle a work environment and conditions, which involve:

- Working closely with others
- Working in a multi-task environment.

Maintain effective audio-visual discrimination and perception needed for:

- Making observations
- Reading and writing
- Operating assigned equipment
- Communicating with others.

### **ACCIDENT PREVENTION PROGRAM**

Required to follow all departments' safety regulations.