CITY OF HOUSTON

JOB DESCRIPTION

Job Code: 778.2

Job Title: **ENGINEER-IN-TRAINING**

Pay Grade: 22

GENERAL SUMMARY:

Performs entry-level engineering tasks under close supervision of professional engineers in the planning, design and construction of civil engineering projects. The work is progressively responsible in the application of engineering standards to ultimately achieve the experience required for licensure as a professional engineer.

RESPONSIBILITES:

- Assists in the development and design of engineering plans, systems and specifications for municipal infrastructure projects such as bridges, mechanical, electrical or traffic control systems, storm water or drainage improvements, wastewater collection or water distribution systems, telecommunications, or other capital improvement projects.

- Assists in various tasks related to the preparation of drawings, specifications and cost estimates for assigned projects.

- Assists in and ultimately performs the review of engineering plans to prepare preliminary engineering plans, preliminary engineering reports and feasibility studies, and to ensure compliance to standards and codes. May recommend design alternatives.

- Provides technical assistance in the administration and supervision of municipal Capital Improvement Projects. Assists with preparation and review of design/construction contracts, plans, specifications, technical reports, invoices and pay estimates, supplemental agreements/appropriations, change orders, requests for information and requests for council action.

- Performs field visits and gathers pertinent information required to assist in the design and preparation of construction drawings.

- Performs periodic inspections of construction work and reports on status of construction, potential problems and contract compliance. Attends and participates in design/construction progress meetings.

- Investigates and responds to inquiries by other City of Houston departments, consultants, agencies, contractors and the general public.

- May perform other duties as assigned.

SPECIFICATIONS:

KNOWLEDGE:

Requires graduation from an approved curriculum in engineering that is approved by the State Board of Registration for Professional Engineers as of satisfactory standing, and possession of a valid Engineering-in-Training Certificate issued by the Board under the current requirements of the Texas Engineering Practice Act.

SPECIFICATIONS: (continued)

EXPERIENCE:
No experience is required.

MINIMUM LICENSE REQUIREMENTS
Possession of a valid Engineering-in-Training Certificate issued by the Board under the current requirements of the Texas Engineering Practice Act.

COMPLEXITY:
Work requires the direct application of a variety of procedures, policies and/or precedents. Moderate analytic ability is required in applying guidelines, policies and precedents, and in adapting standard methods to fit facts and conditions.

IMPACT OF ACTIONS:
Errors in work lead to minor inconvenience and incur some costs. Work is typically performed under close to moderate supervision of routine duties to ensure completion of tasks. The supervisor is generally close by to answer questions.

SUPERVISION EXERCISED:

Direct Supervision:
No direct report employees.

Indirect Supervision:
No indirect reports.

CONTACTS:

Internal Contacts:
Level of internal contact is primarily with professionals and supervisors. Interaction requires moderate tact and cooperation; e.g., scheduling and/or coordinating two personal calendars, resolving problems and/or obtaining necessary information.

External Contacts:
Level of external contact is primarily with service representative**s**, consultant**s**, contractors, vendor**s** and general public. Interaction requires moderate tact and cooperation; e.g., responding to questions which require some research to provide the correct answer.

PHYSICAL EFFORT:
The position is physically comfortable; the individual has discretion about walking, standing, etc.

WORK ENVIRONMENT:
There are occasional minor discomforts from exposure to less-than-optimal temperature and air conditions. The position may involve dealing with modestly unpleasant situations, as with occasional exposure to office chemicals and/or extensive use of a video display terminal.

PHYSICAL SKILL:
Requires the ability to make coordinated gross motor movements in response to changing external stimuli within moderately demanding tolerances; or the ability to make coordinated eye/hand movements on a patterned response space within low tolerance demands with no real speed requirements.

MISCELLANEOUS:
All duties and responsibilities may not be listed in the above job description. Performs related work as required.

JOB FAMILY:

Engineer-In-Training or Graduate Engineer
Engineer
Supervising Engineer
Managing Engineer

Effective Date: February 2021