

Position: Development Engineer	Position Number:
Department/Site: Public Works –City Hall	FLSA: Non-Exempt
Evaluated by: Development Projects Manager	Salary Grade: 38

Summary

Participates in, and performs complex engineering studies and development plan reviews. Serves as a senior contributor on various advanced development review and permit projects.

Distinguishing Career Features

The Development Engineer is the first in a two-tiered career path for engineering professionals engaged in the review of development and construction proposals and plans. The Development Engineer is the first level and requires a bachelor's degree in an engineering discipline and active status as an Engineer-In-Training. Advancement to Senior Development Engineer is possible with attainment of Professional Engineer status and registration and the demonstrated ability to review, approve, and sign development and structural construction plans. The Senior Development Engineer is also expected to perform the most complex engineering computations and analysis.

Essential Duties and Responsibilities

- Participates in reviews of engineering plans for commercial, industrial and residential structures proposed through the permit process.
- Critiques or recommends changes to designs or plans produced internally or by consultants. Provides engineering technical services to other departments or consultants.
- Reviews plans, and may audit structural calculations and specifications prepared by other engineers and technicians for compliance with City standards and accepted engineering practices.
- Monitors work-in-progress on approved plans to assure compliance with agreed upon specifications. Reviews and recommends approval of change orders.
- Assists with developing and implementing engineering standards, specifications, and priorities for the City. Interprets and applies standards in designs and reviews.
- Participates in project planning and design, developing and administering project terms and conditions, evaluating contract compliance and compliance with technical policies.
- Analyzes and prepares reports on effects to the community and environment caused by proposed developments annexations, zone changes, new construction, traffic and other transportation services. Analyzes impact on water and sanitary collections systems.
- Inspects and prepares reports on public works projects, such as, but not limited to subsurface and surface street construction, structures, and other infrastructure, for quality of work and material, for proper line, grade, slope, placement, and for adherence to stipulations and specifications.

- Inspects and prepares progress reports on methods of construction utilized by contractors. Checks for proper dimensions, quantities, and proper use of materials.
- Interprets plan requirements. Verifies accuracy and consistency with plans and drawings. Discusses, explains, interprets and relays changes to contractor during construction.
- Interprets and evaluates construction methods and materials, suggesting alternatives should questions arise about compliance with specifications.
- Inspects and prepares daily reports on the construction of curbs, sidewalks, and street and other pavements for proper grade and slope. Checks forms for proper alignments and surfacing. Checks crown before and after surfacing material has been applied. Inspects gravel, asphalt and other concrete mixes for quality.
- Participates in engineering studies to evaluate the feasibility of proposed or ongoing projects or methods or to determine solutions to existing field problems. Assembles and evaluates technical data and provides guidance on design, construction methods and materials.
- Creates, assembles and maintains complete files of development and construction projects, including change orders and amended drawings.
- Performs other duties as assigned that support the overall objective of the position.

Qualifications

▪ **Knowledge and Skills**

The position requires professional specialization in engineering theory, principles, practices, materials, costs, construction techniques and trends, regulations, standards and equipment. Requires a working knowledge of contract administration typically associated with engineering projects. Requires in-depth knowledge of Microsoft Word and Excel software programs. Requires sufficient human relations skill to convey technical engineering concepts, to facilitate, lead, and guide other professional, trades, and technical employees, and to work cooperatively with internal and external customers. Requires technical writing skills sufficient to prepare project specifications, requests-for-proposal, process documentation, and communications suitable for external distribution. Requires advanced mathematics skills to conduct stress, load bearing, and financial computations.

▪ **Abilities**

Requires the ability to perform all the responsibilities of the position. Requires the ability to interpret, apply, and communicate rules, regulations, laws and ordinances. Requires the ability to prepare, review, approve and interpret engineering plans and specifications. Requires the ability to analyze technical design engineering, construction engineering and surveying problems. Requires the ability to read design and construction-related drawings. Requires the ability to use Microsoft Outlook, Word, Excel and Project, and Adobe Acrobat Pro software. Requires the ability to conduct mathematical computations using physics, algebra, analytic geometry, and statistical analysis. Requires the ability to organize and sequence work associated with the review of complex projects, converting them into approved action plans. Requires the ability to work productively and cooperatively with internal and external customers.

- **Physical Abilities**

The incumbent performs work of a sedentary to moderately active nature. Requires sufficient ambulatory ability to walk to project locations, to stand for extended periods of time, and to bend and stoop for limited periods of time. Requires sufficient arm-hand-eye coordination to operate a computer keyboard and pointing devices at a proficient level. Requires visual acuity to create and read three-dimensional and detailed drawings and observe structural work-in-progress at construction sites. Requires verbal and auditory ability sufficient to carry on conversations with others and make presentations to groups.

- **Education and Experience**

The position requires a bachelor's degree with a major in civil, structural, or a closely related engineering discipline and two years of progressively responsible professional engineering experience.

- **Licenses and Certificates**

Requires a valid driver's license. Requires recognition as an Engineer-In-Training within 6 months of employment.

- **Working Conditions**

Work is performed indoors and outdoors where minimal safety considerations exist.

This job/class description, describes the general nature of the work performed, representative duties as well as the typical qualifications needed for acceptable performance. It is not intended to be a complete list of all responsibilities, duties, work steps, and skills required of the job.