CLASS TITLE: Engineering Technician VI

CHARACTERISTICS OF THE CLASS: Under general direction, performs difficult and professional engineering duties and supervises subordinate professional and technical engineering personnel; and performs related duties as required.

EXAMPLES OF DUTIES: Acts as resident engineer at a large complex construction project or an assistant resident engineer on major projects; directs field personnel in conducting project surveys; supervises the construction of street widening, resurfacing, and reconstruction, earthwork, water mains, culverts, roadway superstructures, sewer systems, retaining walls, traffic installations, and related structures; directs field engineering and construction personnel in major repair activities of incinerators, pumping stations, filtration plants, airports, and related structures; prepares detailed project budgets and quantity estimates; initiates the selection of engineering consultants; calculates partial and final engineering estimates of completed work and prepares payments to contractors; monitors and authorizes expenditures of the engineering and construction phases of project; prepares technical engineering and progress reports; supervises and prepares detailed engineering and contract specifications and project drawings; determines engineering criteria for sewer systems, outfall chambers, underflow tunnel systems, diversion structures, steam generating systems, airport runways, incinerators, pump controls, feeder mains, and other complex construction and building projects; prepares detailed hydraulic computations and difficult mathematical calculations for design; determines accurate alignment of sewers and water main systems; conducts feasibility studies and reports for proposed construction projects; conducts field survey and investigation of site to determine the scope and feasibility of improvements; meets with area residents and business representatives to discuss concerns and problems; prepares preliminary drawings and submits to appropriate City department; coordinates activities between general contractor, utilities, and City departments; supervises and trains subordinate personnel in good engineering practices and procedures; prepares monthly work estimates and required correspondence; acts as engineering supervisor of construction in the absence of the Engineer of Construction; acts as the department's representative on technical matters with City and outside agencies.

DESIRABLE MINIMUM QUALIFICATIONS:

Training and Experience. Six years of progressively responsible engineering experience in the field or office; or an equivalent combination of training and experience.

Knowledge, Abilities and Skill. Thorough knowledge of the theory and practice of engineering design, construction, and inspection procedures. Thorough knowledge of modern construction methods and of the strength and uses of construction materials. Thorough knowledge of the use of surveying and drafting instruments. Ability to originate and check designs, details, estimates, plans, and specifications. Ability to meet and consult with community groups, engineers, and contractors. Ability to supervise and direct the work of professional and technical personnel. Ability to exercise good judgment in evaluating situations and making effective decisions.

Skill in the application of engineering theory and practices to engineering problems and in the use of surveying and drafting instruments. Good oral and written communication skills.

December, 1987