CLASS SPECIFICATION

CIVIL ENGINEER I

DEFINITION

Under supervision, performs a variety of civil engineering assignments that require application of engineering principles, practices and theories; and performs related work as required.

EXPERIENCE AND TRAINING REQUIREMENTS

Graduation from an accredited college or university with a Bachelor's degree in Civil Engineering or a closely related field; OR an equivalent combination of education and experience.

LICENSE OR CERTIFICATE

A valid driver's license.

DISTINGUISHING CHARACTERISTICS

This is the entry and first working level in the Civil Engineer class series. Civil Engineer I is distinguished from Civil Engineer II in that Civil Engineer II is a more experienced working level with incumbents performing a broader range of assignments with greater independence and decision-making responsibilities.

SUPERVISION EXERCISED

NA

EXAMPLES OF DUTIES (The following is used as a partial description and is not restrictive as to duties required.)

Perform subdivision reviews, which includes checking of plats, construction drawings, bonds, and improvement agreements for compliance with tentative map conditions and conformance with Washoe County codes.

Plan and design storm drainage systems for capital improvement project construction.

Review designs of Public Work Projects such as parks, parking lots, and roads for compliance with applicable standards and codes.

Review calculations and estimates on engineering designs and specifications for correctness.

Review field reports and laboratory testing results for soils, concrete, and asphalt for materials specifications compliance.

Learn to perform final inspection for County acceptance of subdivision improvements.

Learn to perform contract administration for projects that includes the bidding and awarding process and ongoing inspection of construction of capital improvement projects.

Respond to questions from developers, contractors, engineers, and the general public concerning use of right-of-way and drainage easements, construction within floodplains, and subdivision construction.
May be assigned to special projects such as issuing street excavation permits, maintaining street light inventory, and authorizing street light installations.

Maintain files and bond estimates for special use permits for material deposits and gold mines.

Review reclamation plans and approve lands for aggregate pits for compliance with regulations and conditions of approval.

**JOB RELATED AND ESSENTIAL QUALIFICATIONS**

**Full Performance** *(These may be acquired on the job and are needed to perform the work assigned.)*

**Knowledge of:**
Department/division policies and procedures.

Computer software specific to the department/division.

Drainage principles and design.

Methods and techniques of design, construction, and maintenance of public works.

Soils, asphalt, and concrete properties.

Contract administration techniques.

Policies governing subdivision development.

**Ability to:**
Review construction plans.

Perform field inspections of subdivisions.

Review field reports and laboratory testing analyses of soils, concrete, and asphalt.

**Entry Level** *(Applicants will be screened for possession of these through written, oral, performance, or other evaluation methods.)*

**Knowledge of:**
Principles and practices of civil engineering including hydrology, street design, hydraulics, structural, soils, topography, cadastral, and constructions surveying.

**Ability to:**
Perform engineering calculations.

Develop preliminary designs.

Interpret construction drawings.

Analyze data, estimating job costs, preparing bid specifications, and tracking expenditures.

Interpret and apply regulations, policies, and procedures.

Communicate effectively, both orally and in writing.

Maintain effective working relationships with contractors, division staff, general public, and representatives of other departments.
SPECIAL REQUIREMENTS

Essential duties require the following physical skills and work environment.

Ability to sit for extended periods. Ability to frequently stand, walk, stoop, and kneel. Ability to lift and move objects weighing up to 25 lbs. Ability to use calculators, map measuring devices, and office equipment including computers, copiers, telephone, and FAX machine.

This class specification is used for classification, recruitment and examination purposes. It is not to be considered a substitute for work performance standards.

Approved  WERCCS Job Evaluation Committee  Date  March, 2001