

Class Code: 469  
CITY OF ANAHEIM  
Class Specification

Classification:  
PRINCIPAL ENGINEERING AIDE

Definition: Under minimal supervision, to perform the most responsible and more complex subprofessional civil or electrical engineering work, including responsible design work, technical plan checking, issue public right-of-way, excavation and construction permits or providing engineering mapping services and CAD drafting services.

Examples of Essential Job Functions: Depending on area of assignment, responsibilities and duties may include, but are not limited to, the following:

Performs civil or electrical engineering project design and layout under the technical direction of professional engineering personnel.

Collects information as to existing structures, grades, electrical system and related information.

Prepares profiles and diagrams showing proposed new grades and utility layouts.

Makes computations involving alignment, closure and electrical system characteristics.

Prepares and revises maps and plans to indicate proposed layouts.

Makes technical and mathematical checks as to the accuracy of plans and calculations submitted by others.

Prepares final plans; reviews plans; coordinates input and revisions; and issues construction permits.

Checks grading plans for conformance requirements; approves minor grading plans; issues grading and excavation permits.

Calculates and compiles engineering requirements on building permits.

Prepares cost and quality estimates for future construction work associated with improvements; establishes necessary fee.

Assists at Public Works-Engineering department counter; issues permits and advises the public concerning building and code requirements.

Collects and processes transportation permits fees.

Coordinates engineering activities with a variety of individuals, groups and organizations.

Designs and prepares orders for materials and minor equipment.

Provides information as to the location of existing and proposed public works and utilities facilities.

Draws permanent maps and plans.

Provides lead supervision in the accumulation and calculation of planning related mapping statistical data such as total mileage of all streets, sewers, curbs and sidewalks or underground electric circuits and street lights within the City limits; computes total area within the City limits.

Provides lead supervision in the recording and filing of plans, plat sheets, and maps.

Inks, pencils, traces and letters charts, graphs, maps, plans and other drawings; prepares miscellaneous illustrative materials such as charts and graphs and illustrative art work.

Assists in ordering blueprints and supplies.

May train and supervise lower-level drafting or mapping personnel.

Performs technical plan checks of electrical plans, City plans, architectural designs, subdivision plats and improvement drawings, annexations and related proposals to ensure compliance with City imposed development conditions and municipal code provisions.

Performs right-of-way, street, sewer and storm drain design.

Examples of Non-Essential Job Functions:

Performs plan checks, calculations and other work related to annexations and property splits or electric utility construction work.

Prepares plans and specifications for the construction of electric utility and public works projects; researches project design requirements; performs calculations; and prepares estimates of quantity and material costs.

Verifies the accuracy of cost estimates and easements.

May make field checks of project sites or survey area to verify survey results or features.

Prepares a variety of special engineering related reports and studies.

Interprets legal descriptions.

Responds to inquiries from developers, contractors, architects, and the general public regarding City requirements related to the construction, alteration, and maintenance of civil engineering or electrical utility facilities.

Performs other job related duties as required.

Minimum Requirements:

Experience: Equivalent to extensive experience comparable to a Senior Engineering Aide.

Knowledge of: (Depending on area of assignment)

Elementary electric power systems or hydraulics and hydrology; principles and practices of civil or electrical engineering; methods and materials in the construction of public works and electric utilities facilities; policies and regulations governing the construction, extension and maintenance of systems and facilities associated with the area of assignment; drafting principles and techniques, CAD, personal computers and related software applications; methods and techniques of engineering, mapping and estimating.

Ability to: (Depending on area of assignment)

Perform technical research and provide reliable advice on engineering problems; communicate effectively, orally and in writing; perform complex engineering calculations with speed and accuracy; prepare complete plans and estimates of routine public works and electric utility projects; use and care for engineering and drafting instruments and related equipment; perform computer aided drafting and design work including maps, plats, sketches, plans, graphs, charts, and other related materials.

Physical Requirements: None

Licenses and/or Certifications Required: Possession of or ability to obtain a valid California Driver's License.

Supervision Received: Works under technical or administrative supervision. Work in progress and completed work is reviewed periodically by Engineering Representative, Assistant Engineer - A, Associate Engineer - A assigned to Public Works Engineering, Assistant Engineer B or Associate Engineer - B assigned to Electrical Engineering Division or a Senior Planner in Planning.

Supervision Exercised: May provide training and lead supervision to Engineering Aides and Sr. Engineering Aides but does not hire, evaluate, or dismiss employees.

Career Ladder Information: Experience in this class supplemented by additional training may serve to meet minimum requirements for promotion to Engineering Representative, Assistant Engineer - A assigned to Public Works Engineering, or Assistant Engineer - A assigned at Electrical Engineering.

FLSA Designation: Non-Exempt

NOTE: The above statements are intended to describe the general nature and level of work being performed by persons assigned to this job. They are not intended to be an exhaustive list of all duties, responsibilities and skills required of personnel so classified. All requirements are subject to possible modification to reasonably accommodate individuals with disabilities.

10/1/85 - Revised - R. Andersen & Assoc.  
12/90 - Revised - C. Harris  
6/93 - Revised - C. Harris  
8/93 - Revised - C. Harris  
Class Concept - Advance Journey Level  
Unit of Representation - AMEA  
Doc: CS1043VK.WP