City and County of San Francisco

Carol Isen Human Resources Director



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NOTICE OF FINAL ACTION TAKEN BY THE HUMAN RESOURCES DIRECTOR

Date: February 27, 2024

Re: Notice of Proposed Classification Actions - Final Notice No. 29 FY 2023/2024

(copy attached).

In the absence of requests to meet addressed to the Human Resources Director, the classification actions contained in the above referenced notice became effective February 27, 2024.

Carol Isen

Human Resources Director

by:

Steve Ponder

Classification and Compensation Director

Human Resources

cc: All Employee Organizations

All Departmental Personnel Officers

DHR - Class and Comp Unit

DHR - Client Services Unit

DHR - Employee Relations Unit

DHR - Recruitment and Assessment Unit

DHR - Client Services Operations

Carol Isen, DHR

Sandra Eng, CSC

Erik Rapoport, SFERS

Theresa Kao, Controller/ Budget Division

E-File

NOTICE OF PROPOSED CLASSIFICATION ACTIONS BY THE HUMAN RESOURCES DIRECTOR

The following actions are being posted in accordance with Civil Service Rule 109. In the absence of a protest addressed to the Human Resources Director, the proposed changes will become final seven (7) calendar days from the posting date.

Posting No: 29

Fiscal Year: 2023/2024
Posted Date: 02/20/2024

Reposted Date: N/A

AMEND THE FOLLOWING JOB SPECIFICATION(S): (Job specification(s) attached)

Item #	Job Code	Title
1	5362	Engineering Assistant
2	5364	Engineering Associate I
3	5366	Engineering Associate II

Protests on an item should be addressed to the Human Resources Director and can be submitted by mail to the City and County of San Francisco, Department of Human Resources, 1 South Van Ness Ave, 4th Floor, San Francisco, CA 94103 or by email to DHR.ClassificationActionPostings@sfgov.org. All protests must be received in writing no later than close of business seven (7) calendar days from the posting date, and must include the posting and item number(s), the basis on which the protest is submitted and identify the affected parties.

Copies of this notice may be obtained from the Department of Human Resources or from the website at: http://sfdhr.org/index.aspx?page=109. Copies of Civil Service Rule 109 may be obtained from the Department of Human Resources, the office of the Civil Service Commission at 25 Van Ness Ave, Suite 720, San Francisco, CA 94102 or from the website at: Rule 109 Position Classification and Related Rules | Civil Service Commission.

cc: All Employee Organizations

All Departmental Personnel Officers

DHR - Class and Comp Unit

DHR - Client Services Unit

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Title: Engineering Assistant

Job Code: 5362

DEFINITION

Under supervision, the Engineering Assistant performs technical engineering/drafting work in the preparation of civil (including structural and/or transportation), electrical, or mechanical engineering drawings and other graphic material using computer-aided design and drafting software products and working accurately and in compliance with City agency's drafting standards.

DISTINGUISHING FEATURES

The Engineering Assistant is the entry level in the technical engineering drafting classification series and is distinguished from the 5364 Engineering Associate I by the latter's higher level of responsibility for overseeing and/or supervising work of others and design functions. There are three distinct specialty areas in this classification: Civil (including structural and transportation), Electrical, and Mechanical.

SUPERVISION EXERCISED

None.

EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES

According to Civil Service Commission Rule 109, the duties specified below are representative of the range of duties assigned to this job code/class and are not intended to be an inclusive list.

- Prepares civil (including structural and/or transportation), electrical or mechanical drawings using computer-aided design and drafting software products in compliance with engineering drafting standards.
- 2. Researches and reviews record drawings to obtain as-built information and collects and calculates field and departmental data needed for the preparation of designs and drawings.
- 3. Conducts site investigations with engineers of existing facilities to determine and verify layout.
- 4. Updates, and maintains engineering documents and drawing records.
- 5. Reviews drawing submittals from utility agencies or other City departments and utilize the information submitted in the preparation of construction drawings.
- 6. Updates Geographic Information System or drawing milestone database at various stages of a project.

KNOWLEDGE, SKILLS, AND ABILITIES

<u>Knowledge of:</u> the latest design systems, technologies, and processes for technical drafting including the techniques, standards, nomenclature, and symbols relevant to each engineering discipline and/or specialty areas used in the preparation of engineering drawings and other graphic material.

Title: Engineering Assistant

Job Code: 5362

<u>Ability or Skill to:</u> prepare design drawings using current trending design systems, software technology and processes; demonstrate beginner to intermediate knowledge of at least one CAD or BIM design, such as AutoCAD Map 3D, Civil 3D, and/or Revit; use mathematical functions to solve drafting, design, construction, maintenance and other problems; complete forms; communicate orally and in writing in a clear and understandable manner; transcribe and/or interpret survey and/or field notes.

MINIMUM QUALIFICATIONS

These minimum qualifications establish the education, training, experience, special skills and/or license(s) which are required for employment in the classification. Please note, additional qualifications (i.e., special conditions) may apply to a particular position and will be stated on the exam/job announcement.

Education

Experience

Two (2) years of verified civil (including structural or transportation), electrical, or mechanical technical engineering drafting experience using CAD or BIM systems to prepare engineering drawings.

License and Certification

Possession of a valid California driver's license.

Substitution:

Additional education with major coursework in Computer-Aided Design and Drafting from an accredited college or university may be substituted for the required experience on a year-for-year basis. Thirty (30) semester units or forty-five (45) quarter units equal one year; OR

Possession of a current and valid Autodesk Certified Professional and Expert certificate may be substituted for the two (2) years of verified technical engineering drafting experience above.

SUPPLEMENTAL INFORMATION

PROMOTIVE LINES

To: 5364 Engineering Associate I

ORIGINATION DATE: 12/18/1972

Title: Engineering Assistant

Job Code: 5362

AMENDED DATE: 12/18/1972; 11/10/00; 01/31/08, 03/19/08

10/22/04, 03/17/14; 02/27/24

REASON FOR AMENDMENT: To accurately reflect the current tasks, knowledge, skills & abilities,

and minimum qualifications.

BUSINESS UNIT(S): COMMN SFMTA

Title: Engineering Associate I

Job Code: 5364

DEFINITION

Under general supervision, the Engineering Associate I performs intermediate to advanced technical engineering and/or drafting work in the preparation of civil (including structural and transportation), electrical, or mechanical engineering drawings and other graphic material using computer-aided design and drafting software products and working accurately and in compliance with City agency's drafting standards.

DISTINGUISHING FEATURES

The Engineering Associate I is the journey level in the technical engineering drafting classification series and is distinguished from 5362 Engineering Assistant by its higher level of responsibility for overseeing and/or supervising work of others and design functions. It is distinguished from the 5366 Engineering Associate II by the latter's responsibility for full supervision. There are three distinct specialty areas and/or disciplines in this classification: Civil (including structural and transportation), Electrical, and Mechanical.

SUPERVISION EXERCISED

May supervise the work of technical staff.

EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES

According to Civil Service Commission Rule 109, the duties specified below are representative of the range of duties assigned to this job code/class and are not intended to be an inclusive list.

- 1. Prepares civil (including structural and/or transportation), or electrical, or mechanical engineering drawings and other graphic material using computer-aided design and drafting software products in compliance with City agency's standards, policies and procedures.
- Researches and reviews record drawings to obtain as-built information and conducts engineering investigations; collects and calculates field/departmental data in the preparation of designs and drawings.
- 3. Checks and reviews engineering documents and drafting work of other staff for accuracy, engineering sufficiency, and conformance to specifications and standards.
- 4. Updates and maintains engineering documents and drawing records.
- 5. Conducts site investigations with engineers of existing facilities to determine and verify site layout.
- 6. Identifies, develops, and enforces CAD and/or BIM drafting procedures and standards.
- 7. Reviews drawing submittals from utility agencies or other City departments and utilizes the information submitted in the preparation of construction drawings.
- 8. Coordinate with drafters from other disciplines to maintain project drafting consistency.
- 9. Updates Geographic Information System or drawing milestone database at various stages of a project.
- 10. Incorporates data from topographical surveys to prepare drawings.

Title: Engineering Associate I

Job Code: 5364

KNOWLEDGE, SKILLS, AND ABILITIES

<u>Knowledge of:</u> the current design systems, technology, and software processes for technical drafting including the techniques, standards, nomenclature and symbols relevant to each engineering specialty area and/or discipline and used in the preparation of engineering drawings and other graphical output.

Ability or Skill to: prepare designs using current trending design systems software technology and processes; demonstrate intermediate to advanced knowledge of at least one CAD or BIM design application, such as AutoCAD Map 3D, Civil 3D, and/or Revit; use mathematical functions to solve drafting, design, construction, maintenance and other problems; complete forms; communicate orally and in writing with the general public, other city personnel, and contractors in a clear and understandable manner; transcribe and interpret survey field notes; process and/or review drawing submittals from contractors, utilities, and others; supervise, schedule, assign and check the work of technical personnel; and use computer design tools (such as third party software); and maintain organizational CAD standards.

MINIMUM QUALIFICATIONS

These minimum qualifications establish the education, training, experience, special skills and/or license(s) which are required for employment in the classification. Please note, additional qualifications (i.e., special conditions) may apply to a particular position and will be stated on the exam/job announcement.

Education:

Experience:

Four (4) years of verified civil (including structural /or transportation), or electrical, or mechanical technical engineering drafting experience using CAD or BIM systems to prepare engineering drawings and other engineering graphic material, at least two (2) years of which must have been in a position with duties comparable to those of Class 5362 Engineering Assistant.

License and Certification:

Possession of a valid California driver license.

Substitution:

Additional education with major coursework in Computer Aided Design and Drafting from an accredited college or university may be substituted for the required experience on a year-for-year basis (up to a maximum of two (2) years). Thirty (30) semester units or forty-five (45) quarter units equal one (1) year; OR

Title: Engineering Associate I

Job Code: 5364

Possession of a current and valid Autodesk Certified Professional & Expert certificate may be substituted for the two (2) of the four (4) years of verified technical engineering drafting experience above.

SUPPLEMENTAL INFORMATION

PROMOTIVE LINES

From: 5362 Engineering Assistant To: 5366 Engineering Associate II

ORIGINATION DATE:

AMENDED DATE: 12/18/72; 11/10/00; 01/13/05; 03/18/08; 03/17/14;

02/27/24

REASON FOR AMENDMENT: To accurately reflect the current tasks, knowledge, skills & abilities,

and minimum qualifications.

BUSINESS UNIT(S): COMMN SFMTA

Title: Engineering Associate II

Job Code: 5366

DEFINITION

Under general direction, the Engineering Associate II performs advanced technical engineering drafting work in the preparation of civil (including structural and transportation), electrical, or mechanical, engineering drawings and other graphic material using computer aided software design and drafting products in compliance with City Agency's drafting standards; leads the organization to set and update drafting standards and techniques; works with engineers and drafting personnel to enforce compliance with drafting standards to a high quality; and be the liaison between section and departments for drafting related software and hardware issues.

DISTINGUISHING FEATURES

The Engineering Associate II is the advanced level in the technical engineering drafting classification series. It is distinguished from the 5364 Engineering Associate I by the increased level of supervisory responsibility and complexity of duties. There are three distinct specialty areas/disciplines in this classification: Civil (including structural and transportation), Electrical, and Mechanical.

SUPERVISION EXERCISED

Supervises technical staff.

EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES

According to Civil Service Commission Rule 109, the duties specified below are representative of the range of duties assigned to this job code/class and are not intended to be an inclusive list.

- 1. Prepares and supervises the preparation of civil (including structural and transportation), mechanical or electrical engineering design drawings, 3D design models, and/or other graphical outputs using computer aided design and drafting software products in compliance with City agency's standards, policies and procedures.
- 2. Performs and checks basic engineering calculations in connection with plans, drawings, and specifications.
- 3. Coordinates with utility companies and city departments to obtain site information and asbuilts and reviews the drawing submittals in the preparation of construction drawings.
- 4. Prepares cost estimates and quantity lists for projects.
- 5. Plans, assigns, monitors, trains, and evaluates the drafting work of staff for accuracy, engineering sufficiency, and conformance to specifications and standards; includes completing performance evaluations.
- 6. Prepares site drawings from topographical surveys.
- 7. Conducts site investigations with engineers of existing facilities to determine and verify site layout.
- 8. Updates and maintains engineering documents and drawing records.

Title: Engineering Associate II

Job Code: 5366

- 9. Updates Geographic Information System database at various stages of a project.
- 10. Researches and reviews record drawings to obtain as-built information and conducts engineering investigations to collect, calculate, and verify engineering field data for the preparation of designs and drawings.
- 11. Work with the records and drawing standards team and identifies, develops, trains, and enforces CAD and/or BIM procedures and standards to staff.
- 12. Collaborates with drafters from other disciplines and agencies to maintain project drafting consistency and develop procedure and policy for CAD standards.

KNOWLEDGE, SKILLS, AND ABILITIES

<u>Knowledge of:</u> Engineering design and construction including but not limited to civil (including structural and transportation), mechanical, and electrical drafting methods and procedures; the latest design systems, technology and processes for technical drafting including the techniques, standards, nomenclature and symbols relevant to each engineering design discipline and/or specialty area used in the preparation of engineering drawings and other graphical output; advanced levels of at least one CAD or BIM design application in the preparation of design models and drawings.

Ability or Skill to: Prepare design drawings using current design systems, software technology and processes such as AutoCAD Map 3D, Civil 3D, and/or Revit; use mathematical functions to solve drafting, design, construction, and other problems; communicate orally with the general public, other City personnel, and contractors in a clear and understandable manner; communicate effectively in writing including preparing reports and correspondence; transcribe and interpret survey and/or field notes; process and/or review submittals from contractors, utilities, and others; supervise, schedule, assign and check the work of technical personnel; and use computer design tools (such as third party software); maintain and train organizational CAD standards; supervise and train technical engineering and entry level engineering staff by prioritizing, planning, assigning, and evaluating work; relate effectively with people.

MINIMUM QUALIFICATIONS

These minimum qualifications establish the education, training, experience, special skills and/or license(s) which are required for employment in the classification. Please note, additional qualifications (i.e., special conditions) may apply to a particular position and will be stated on the exam/job announcement.

Education:

Experience:

Six (6) years of verifiable civil (including structural or transportation), mechanical, or electrical technical engineering drafting experience using CAD or BIM systems to prepare engineering

Title: Engineering Associate II

Job Code: 5366

drawings and other engineering graphic material, including experience in engineering design, detailing, construction documentation, coordination and review, document controls, and field inspection of construction projects, of which at least two (2) years must have been in a position(s) with duties comparable to those of Class 5364 Engineering Associate I.

License and Certification:

Possession of a valid California Drivers License.

Substitution:

Additional education with major coursework in Computer Aided Design and Drafting from an accredited college or university may be substituted for the required experience on a year-for-year basis (up to a maximum of two (2) years). Thirty (30) semester units or forty-five (45) quarter units equal one (1) year; OR

Possession of a current and valid Autodesk Certified Professional & Expert certificate may be substituted for the two (2) of the six (6) years of verified technical engineering drafting experience above.

Note: There is no substitution for the required two (2) years of work experience equivalent to a 5364 Civil Engineering Associate I.

SUPPLEMENTAL INFORMATION

PROMOTIVE LINES

From: 5364 Engineering Associate I

ORIGINATION DATE: 09/17/1973

AMENDED DATE: 11/29/1999; 03/30/04; 02/27/24

REASON FOR AMENDMENT: To accurately reflect the current tasks, knowledge, skills & abilities,

and minimum qualifications.

BUSINESS UNIT(S): COMMN SFMTA