CLASS SPECIFICATION
Engineering Technician III

FLSA Status: Covered
Union Representation: Professional and Technical Employees (PTE)

GENERAL PURPOSE

Under direction, performs advanced technical engineering support or engineering-related assignments, applying scientific and technical knowledge across a spectrum of engineering design, construction, and permit processing functions; performs advanced drafting, computer operation, technical writing, research, map reading, plan review and field inspections; and performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS

Engineering Technician III is the advanced journey-level class in the Engineering Technician series. Incumbents lead and participate in the work of lower-level technical and administrative personnel and perform the more difficult analysis, drafting, plan checking, site review and related technical duties in the assigned unit. Completed work is reviewed in terms of compatibility with requirements, effectiveness and expected results.

Engineering Technician III is distinguished from Engineering Technician II in that incumbents in the former class provide lead direction to other engineering support staff, fill more complete project management assignments, and perform the most difficult and responsible technician-level work.

ESSENTIAL DUTIES AND RESPONSIBILITIES

Any one position in this class may not perform all the duties listed below, nor do the listed examples of duties include all similar and related duties that may be assigned to this class.

1. Provides day-to-day leadership and works with staff to ensure a high-performance, customer service-oriented work environment that supports achieving the bureau's and the City's mission, objectives and values; applies process improvement principles to assigned areas of responsibility.

2. Leads and participates in the work of technical and administrative personnel in the performance of technical, paraprofessional engineering and administrative work.

3. As a project manager, oversees discrete projects by scheduling, assigning and directing processes performed by support or other technical staff; reviews work products; prepares cost estimates, monitors and maintains records on the financial status and progress of work to ensure projects are completed on schedule and meet local, state or federal standards.

4. Confers with representatives from engineering firms, developers, property owners, utilities, other governmental agencies and contractors on technical matters to verify data, coordinate various stages of work, and explain the City's processes, codes and procedures.

5. Responds to customer and public inquiries and complaints; explains and interprets codes, policies,

standards, fees and procedures to the public.

6. Reviews and evaluates studies, designs, reports and records generated by other divisions/bureaus and outside entities; analyzes data and makes recommendations; performs advanced analysis, evaluation and system design work; adapts quantitative models to computer programs; organizes complex data for purpose of computer modeling; collects, analyzes, summarizes and stores programmatic data to improve program effectiveness using computers, source documents and other records.

7. Oversees the processing of applications for permits, inspections or services; oversees permit issuance.

8. Through independent, onsite visits, collects field data, verifies conditions, takes measurements, notes potential or developing problems, makes recommendations and carries out other duties related to the field visit.

9. Provides administrative, logistical and technical project oversight by assisting in the bidding process, reviewing specifications and submittals, managing records, files and databases, reviewing and preparing project documentation, gathering, recording and evaluating data, preparing reports and work orders, enforcing standards and specifications; verifying accuracy of and issuing payments, making recommendations on change orders, and preparing for and conducting meetings.

10. Composes correspondence and drafts ordinances; prepares reports and presentations, including graphics, maps and technical drawings, to describe project or program goals and activities using manual or computer tools.

11. Reviews a variety of plans and applications, e.g., building, traffic and parking control, water service, street improvement plans, land use for conformance to regulations and standards to ensure public safety using knowledge of codes, master plans and accepted practices; coordinates plan review process with other bureaus; prepares comments and conditions of approval.

12. Designs, develops, maintains, and operates limited energy electrical systems, electronics, and applies network security to network enabled instrumentation and communications systems in a SCADA environment; develops and implements environmental data quality control and quality assurance, uses analytic problem solving and develops and adheres to maintenance and repair procedures; utilizes software applications and test equipment for programming telemetry communications and instrumentation systems in a municipal wastewater system.

OTHER DUTIES

1. Facilitates staff meetings.

2. Participates in hiring processes for section technical staff.

3. Prepares, schedules and presents training of support or other technical staff.

4. Coordinates, schedules and attends community and neighborhood meetings related to assigned projects.

5. May provide afterhours emergency response for critical system failures and respond to emergencies as required.

MINIMUM QUALIFICATIONS

Knowledge of:

1. Engineering and/or architectural terminology, practices, procedures and basic principles; technical standards involved in design and construction engineering and specification development.

2. Mathematics, algebra, geometry, trigonometry and statistics related to engineering work.

3. Federal and state laws and regulations relating to program area; working knowledge of municipal regulating codes pertaining to assigned projects or programs.

4. Standard office practices and procedures including manual and electronic file development and maintenance; specialized data gathering and research techniques; methods and procedures for archiving and retrieving technical documents, maps and drawings.

5. Principles, standards and practices of engineering, constructions and maintenance project management; contract management including specification writing, cost estimating techniques, project tracking and required documentation.

6. City operating policies and departmental work procedures and quality standards.

7. Computer use, applications, languages and programming techniques pertaining to the work.

Ability to:

1. Manage various standard public works, engineering-oriented construction and maintenance projects.

2. Lead the activities of staff and contract personnel involved in assigned projects; coordinate projects with other City units and outside agencies.

3. Conduct field investigations and inspections.

4. Provide knowledgeable, technical guidance and advice to City staff, other government agencies, private businesses and citizens.

5. Operate a computer and use a variety of programs; maintain technical files both electronic and manual; utilize specialized engineering, drafting, measuring, surveying, or electronic tools, materials and equipment.

6. Use safety precautions when working at field sites.

7. Read and interpret various kinds of maps, architectural and engineering drawings, construction plans, blueprints and other technical materials and documents, such as specifications, engineering manuals, surveying tables, computer manuals, trade journals, equipment instruction manuals, engineering code provisions, state and federal guidelines; learn and apply local, state or federal codes and regulations.

8. Clearly present technical information in oral, written, graphic or other forms; speak in front of groups; cope with dissent and conflict.

9. Perform complex work thoroughly, accurately and efficiently.

10. Establish and maintain effective working relationships with bureau management and staff, contractors and others encountered in the course of work.

11. Interact effectively to problem solve and partner with citizens, community groups and contractors and to negotiate agreements with contractors and the public.

Training and Experience:

A typical way of obtaining the knowledge, skills and abilities outlined above is graduation from high school, trade school or vocational school, or G.E.D. equivalent and supplemented by courses in engineering technology; and four years of progressively responsible engineering technician experience; or an equivalent combination of training and experience. Experience in a public agency is preferred.

Licenses; Certificates; Special Requirements:

A valid state driver's license may be required for certain assignments. Some positions may require additional certifications and licenses.

PHYSICAL AND MENTAL DEMANDS

Persons with disabilities may be able to perform the essential duties of this class with reasonable accommodation. Reasonable accommodation will be evaluated on an individual basis and depends, in part, on the specific requirements for the job, the limitations related to disability and the ability of the hiring bureau to accommodate the limitation.

Class History:

Adopted: 01-01-90 Project Coordinator (3133) class created as a result of consolidating the following COPPEEA classes:
- 0940 Alternative Transportation Program Manager (Revised 02-25-85)
- 3146 Rates and Charges Supervisor (Adopted 11-15-83)
- 3254 Communications Engineer II (Revised 06-19-79)
- 3355 Urban Projects Coordinator (Revised 04-17-84)

3365 Light Rail Project Coordinator (Adopted 04-19-83)

Revised: 01-02-92 Renamed Engineering Technician III (3109).
Revised: 11-16-92 Addition of Right-of-Way Acquisition Specialty.
Revised: 07-01-93 Revised Traffic Management specialty.
Revised: 03-31-94 Updated Transportation Specialty to include Pedestrian program.
Revised: 06-30-94 Reformatted class specification and added summary statement to specialties.
Revised: 04-03-95 Spec reviewed for supervisory language.
Revised: 12-08-95 Added CADD specialty.
Revised: 08-15-96 Added Facilities Projects specialty.
Revised: 08-30-96 Added GIS specialty.
Revised: 08-30-96 Added Materials Testing specialty.
Revised: 10-20-00 Added Signals specialty.
Revised: 07-01-01 Spec revised as part of the COPPEA Classification and Compensation study. Engineering Technician III (6023) class created from the following COPPEA class(es):
3109 Technician III (Engineering specialty)
Revised: 08-01-06 Spec history revised to reflect pre-2001 COPPEA Study history. Spec formatting modified.
Revised: 08-07-06 Revised FLSA status from "Non-exempt" to "Covered."
June 2009 - Change Job Class number from 6023 to 30000326, due to system change.
July 2017 – Updated union name from COPPEA to PTE
Revised: 11-1-19 Updated duties to include telemetry, after hours response, and certifications.