CLASS SPECIFICATION
Engineering Technician II

FLSA Status: Covered
Union Representation: City of Portland Professional Employees Association (COPPEA)

GENERAL PURPOSE

Under general supervision, performs specialized support and technical assignments of moderate to advanced difficulty applying scientific and technical knowledge in the areas of engineering, construction and permit processing, including explaining policies and procedures to the public to achieve understanding, cooperation and compliance with codes; performs drafting, computer operation, technical writing, research, map reading, plan review and field inspections; and performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS

Engineering Technicians II are responsible for performing moderate to difficult engineering, construction or permit processing tasks using independent judgement and specialized technical and scientific knowledge. Incumbents produce a variety of technical materials, correspondence, documents, plans, drawings, specifications, cost estimates and project schedules and ensure quality control and compliance with applicable regulations, standards and policies of a variety of public works projects and processes.

Engineering Technician II is distinguished from Engineering Technician III in that incumbents in the latter class have greater responsibilities for project management including development of time lines, schedules and budgets. Engineering Technicians III also perform less of the actual project work and more of the coordination of lower-level technical employees.

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. As a project leader, coordinates projects by assigning, directing and coordinating discrete tasks and 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.

2. Responds to customer and public inquiries and complaints; explains and interprets codes, policies, standards, fees, and procedures to members of the public, contractors, engineers, architects and other public or utility organization employees to resolve problems, improve their understanding of City programs and to ensure adherence to procedures in complex technical matters.

3. Performs analysis, evaluation and system design work; adapts quantitative models to computer programs; organizes data for purpose of computer modeling.

4. Collects, analyzes, summarizes and maintains integrity of programmatic data to improve program effectiveness using computers, source documents, and other records according to established procedures.

5. Processes applications for permits, inspections or services; issues permits.

6. Performs specialized data gathering and research; analyzes data and makes recommendations.

7. 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.

8. Provides administrative, logistical and technical support to project and construction management staff 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, writing change orders, and preparing for and conducting meetings.

9. Composes correspondence and drafts ordinances.

10. Drafts and maintains detailed infrastructure maps using manual or computer-aided methods.

11. Prepares reports and presentations, including graphics, maps, and technical drawings to describe project or program goals and activities using manual or computer tools.

12. 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.

OTHER DUTIES

1. Facilitates staff meetings.

2. Participates in hiring processes for section technical staff.

3. Assists in the development of the CIP by maintaining database, reviewing Project Request Forms for completeness and accuracy, documenting project review meetings; processing project actions forms; performing cost estimate calculations, overseeing the trending process; and inputting data into the project-scheduling program.

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

5. Coordinates, schedules and attends community and neighborhood meetings related to program.

6. Makes minor repairs or adjustments on field recording devices; collects samples.

7. Facilitates the acquisition of property easement.

MINIMUM QUALIFICATIONS

Knowledge of:

1. Engineering and/or architectural terminology, practices, procedures and basic principles.

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. Direct the activities of staff and contract personnel involved assigned projects.

3. Conduct field investigations and inspections; collect field data and samples and analyze and make recommendations regarding data and sampling results.

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, and 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 detailed work thoroughly, neatly, 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/or 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, supplemented by courses in engineering technology; and two 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.

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 depend, 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 Created as a result of consolidating the following COPPEEA classes:

1714	Water Quality Technician (Adopted 11-15-83)
3139	Architectural Drafting Specialist (Revised 12-08-87)
3140	Engineering Technician (Revised 05-21-85;11-19-85;02-20-87)
3141	Senior Engineering Technician (Revised 10-19-82)
3144	Engineering Specialist (Revised 05-51-85)
3147	Senior Engineering Specialist Adopted 06-18-85)
3216	Right-of-Way Technician (Revised 07-17-84)
3252	Communications Engineer I (Adopted 11-16-79. Revised 02-26-88)
3353	Environmental Impact Analyst (Adopted 04-17-84)
3357	CBD Field Coordinator (Adopted 10-18-83)
NEW	Environmental Specialist (II)

Revised:	08-04-93	Added Materials Testing specialty.
Revised:	10-29-93	Reformatted specification and added Environmental specialty.
Revised:	04-03-95	Spec reviewed for supervisory language.
Revised:	08-15-96	Added Facilities Project specialty.
Revised:	08-30-96	Added GIS specialty.
Revised:	09-19-96	Added Customer Support specialty.
Revised:	10-25-96	Deleted DRAFTING specialty.
Revised:	05-26-98	Revised Communications specialty.
Revised:	10-07-98	Added Survey / Mapping Data specialty.
Revised:	07-01-01	Spec revised as part of the COPPEA classification and compensation study. Engineering Technician II (6022) class created from the following COPPEA class(es): 3108 Technician II (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 6022 to 30000325, due to system change.