COMPETENCY MODEL FOR SENIOR CIVIL ENGINEERING DRAFTING TECHNICIAN CLASS CODE 7207

The following competencies have been identified as those that best separate superior from satisfactory job performance in the class of **SENIOR CIVIL ENGINEERING DRAFTING TECHNICIAN**. (Numbers refers to the order of competencies in the Competency Bank.)

- 1. Reading Comprehension
- 2. Mathematics
- 4. Analytical Ability
- 6. Attention to Detail
- 12. Conscientiousness
- 20. Job Knowledge
- 28. Supervision
- 33. Interpersonal Skills

On the following pages are descriptions of each competency, including a definition, the level of the competency required for the class (italicized, bolded, and underlined), examples of behavioral indicators, and satisfactory and superior performance levels.

1. READING COMPREHENSION – Comprehends and correctly applies information presented in written form. Makes correct inferences; draws accurate conclusions.

Level of Competency Required by Job:

Level 1: Concrete, specific job-related information (work orders; instructions; material/equipment labels)

Level 2: General information related to field of work and assignments; (articles in trade publications; technical/instructional manuals; memos; letters; e-mails; reports)

Level 3: Abstract/complex information (highly technical articles/ reports in specialized area; legal or other regulatory material)

Examples of Behavioral Indicators:

- Follows written instructions correctly.
- Learns information presented in writing.
- Identifies relevant written information.
- Interprets written legal regulatory material accurately.

Performance Levels:

<u>Satisfactory</u> <u>Superior</u>

Reads instructions correctly. Learns from manual and other printed material.

Learns from manuals and may answer others' questions. Explains information presented in written form to others.

2. MATHEMATICS – Performs arithmetic or higher-level mathematical computations accurately.

Level of Competency Required by Job:

Level 1: Perform arithmetic computations (add, subtract, multiply, divide, ratios, percentages).

Level 2: <u>Use algebra (substitute numbers for letters in a formula),</u> geometry (angles, distances, area), and/or descriptive statistics (mean/median/mode, standard deviation, range).

Level 3: Apply and interpret calculus, inferential statistics (t-tests, correlations, ANOVA, multiple regression) or other very high level mathematics.

Examples of Behavioral Indicators:

- Quickly and accurately performs arithmetic computations.
- Appropriately selects and applies formulas for stated purpose.
- Correctly identifies an appropriate analysis for a specific purpose and selects the appropriate computer program for computation.
- Accurately interprets and presents results of mathematical/statistical computations.

Performance Levels:

<u>Satisfactory</u> <u>Superior</u>

Knows mathematical requirements of the job and performs them correctly. Verifies work to ensure accuracy. Identifies additional opportunities for the application of mathematics in work. Answers questions/trains others to assist them in their use of mathematics.

4. ANALYTICAL ABILITY – Identifies, obtains, and evaluates relevant information to establish relationships or patterns, cite causes, and reach logical conclusions.

Level of Competency Required by Job:

Level 1: Recognize similarities/differences in current situation to those previously encountered and is guided accordingly. Apply existing policies correctly. Ask pertinent questions or otherwise seek additional information to formulate appropriate response.

Level 2: Consider multiple, varied factors when evaluating a situation or issue. Seek additional information to provide further insight. Reach conclusions that logically follow from the information obtained.

Level 3: <u>Consider a multitude of diverse factors, their interrelationships, the perspectives of others, alternative courses of action and their likely ramifications when evaluating information to reach a conclusion.</u>

Examples of Behavioral Indicators:

- Obtains the necessary amount of relevant information.
- Recognizes the impact of each type of information on conclusions.
- Evaluates the quality/source of information when considering it.
- States the shortcomings of the information and, therefore, the analysis.

Performance Levels:

<u>Satisfactory</u> <u>Superior</u>

Recognizes available relevant information, seeks additional information to consider, and reaches a conclusion. Provides sound, convincing justification for conclusions, citing relevant data and facts.

Uses a great deal of existing and obtained information and data to develop and evaluate alternatives and arrive at a final conclusion. Provides compelling arguments in support of conclusions.

6. ATTENTION TO DETAIL – Extremely careful in addressing all aspects of each work assignment in order to produce "completed staff work" and/or avoid any negative outcomes.

Level of Competency Required by Job:

Level 1: Ensure all aspects of work assignment are completed as directed.

Level 2: Verify that each aspect of work assignment is properly completed; make logical inference regarding additional activities that may need

to be performed to produce "completed staff work."

Level 3: <u>Include evaluation of final work/work product in its</u> <u>accomplishment; make adjustments as possible to improve.</u>

Examples of Behavioral Indicators:

- Carefully checks all aspects of work for completion and accuracy before submitting.
- Identifies errors (for example, typo's, computations, measurements, application of laws/rules/policies) and corrects them prior to submitting.
- Cross-checks work against available resources.
- Sets up a means of checks and balances to ensure work accuracy.
- Considers changes in final work product to ensure usability by recipient.
- Completes all revisions upon request.

Performance Levels:

<u>Satisfactory</u> <u>Superior</u>

Ensures that each task accomplished represents "completed staff work." No remaining details/ inconsistencies for others to address.

All aspects of each task completed are verified to be correct. Identifies any foreseeable consequences of work that may need to be addressed and does so.

12. CONSCIENTIOUSNESS – Dependable, reliable, diligent, and attends to all aspects of assignments (the "details").

Level of Competency Required by Job:

Level 1: Remain on-task and make every reasonable effort to complete work

in time allotted. Note discrepancies and takes action or informs appropriate person when "things don't seem right" in information or

data.

Level 2: Note when own work logically relates to the work of others and

coordinate with them and when additional tasks must be performed to complete an assignment and perform/assign them. Recognize when, despite best efforts, work will not be

done and notifies supervision.

Level 3: Attend to each area of responsibility, and if all are not being

addressed, arrange for transfer or elimination of some of them. Ensure that all aspects of programs/projects are properly addressed

to ensure success.

Examples of Behavioral Indicators:

- Seeks all necessary information to do the job well.
- Learns from experience so can recognize when things are not right.
- Maintains a high level of task-related behavior.
- Continues to work diligently in the absence of supervision.
- Fully attends to seemingly minor as well as major aspects of each work assignment.

Performance Levels:

Satisfactory

Fully attends to work at hand; notes details, errors, and discrepancies and follows-up as necessary. Reliably performs and completes work. Punctual; respectful of others' time.

Superior

Notes relationship of own work to work of others to ensure all aspects are coordinated. Performs additional tasks and otherwise follows-up to ensure thoroughness.

20. JOB KNOWLEDGE – Knows information required to perform a specific job. Includes both widely available courses of study (for example, chemistry, human resources management, graphic arts) and City-specific information (parking regulation and ticketing practices; purchasing procedures; provisions of the City Charter).

Level of Competency Required by Job:

Level 1: Knowledge acquired after hire in a brief orientation, short training program, or through on-the-job training.

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Level 2: Knowledge acquired through an apprenticeship or extensive training program, or long duration of job performance.

Level 3: Knowledge acquired through a prolonged external course of study and/or extensive training and experience within the City.

Examples of Behavioral Indicators:

- Performs work correctly/avoids technical (job content related) errors.
- Answers technical questions about work accurately.
- Asks a few technical questions about the performance of routine work activities.
- Offers advice ("coaching") to new employees regarding their work.
- Develops training programs for other employees.

Performance Levels:

<u>Satisfactory</u> <u>Superior</u>

Sufficient job knowledge to perform work correctly independently. Answers technical questions about work correctly.

Expertise in technical job information sufficient to serve as a resource to others. May develop training manuals/programs and/or give internal and/or external presentations related to work.

Senior Civil Engineering Drafting Technician (7207) Job Knowledge Areas

- 1. Knowledge of the scope and interpretation of national and local standards, such as American Water Works Association (AWWA), Brown Book, Green Book, City of Los Angeles Civil Standards, Traffic Manuals, and other pertinent building codes sufficient to complete plans, approve permits, and ensure safety in the field.
- 2. Knowledge of the methods, calculations, equipment, and materials used in civil engineering drafting; details, drafting conventions and symbols used in different types of drawings; and potential problem areas in construction related to details which appear in diagrams, schematics, and plans sufficient to draw and interpret design plans, such as streets, storm drains, sewers, sewage treatment plants, bridges, buildings, runways, airport lighting systems, street lighting systems, water distribution systems, power systems, marine structures, and retaining walls earthwork, along with details, cross-sections, and profiles.
- 3. Knowledge of drafting tools, materials, and equipment, such as computer aided drafting (CAD) (e.g. Revit, Civil 3D, Map 3D, or MicroStation), and their proper applications sufficient to make calculations and prepare design plans.
- 4. Knowledge of leveling, plane, and geodetic surveying techniques, angular measurement and calculations and various mapping standards, conventions, and symbols sufficient to prepare elementary surveys and maintain record maps.
- 5. Knowledge of the preparation and interpretation of property legal descriptions sufficient to verify property descriptions on building permits and other documents.
- Knowledge of the characteristics of various reproduction processes including allowable amounts of reduction or enlargement, quality of reproduction and dimensional stability sufficient to print photocopies, and plotting to a digital format, such as PDF, DWF, and JPEG.

- **28. SUPERVISION** Ability to assume direct responsibility for all aspects of the performance of a work group, which requires knowledge and/ability in the areas of:
- Planning and goal setting
- Creating a safe and positive work environment
- Establishing standards and training employees
- Motivating employees and team building
- Performance Management (assigning, monitoring, facilitating, reviewing and evaluating work, and providing feedback)
- Supporting and developing employees through delegation and participation
- Taking disciplinary action including progressive discipline
- Provisions of employees' MOU's and handling grievances
- Legal requirements including EEO, ADA, FLSA, FMLA, and Workers' Compensation provisions
- Civil Service Commission Rules and Policies related to the management of employees
- Administrative Code provisions related to the management of employees
- Budget processes sufficient to request and justify expenditures in a correct and timely manner

Level of Competency Required by Job:

- Level 1: Supervises small workgroup of employees performing the same or highly related work.
- Level 2: Supervises a larger workgroup of employees performing various types of work.
- Level 3: Supervises employees including provision of coaching and advice to subordinate supervisors.

Examples of Behavioral Indicators:

- Plans, assigns, and monitors work progress.
- Trains employees to do work.
- Evaluates work and gives positive and negative feedback.
- Displays knowledge of legal requirements including applicable Federal and State laws, Administrative Code provisions, Civil Service Commission Rules and Policies, and MOU provisions.

Performance Levels:

<u>Satisfactory</u>

Proficiency in supervision sufficient to supervise a workgroup in terms of task orientation, interpersonal concerns, and personnel administration.

Superior

Proficiency in supervision sufficient to serve as a resource to others and/or represent department position in a public forum.

33. INTERPERSONAL SKILLS – Interacts effectively and courteously with others.

Level of Competency Required by Job:

Level 1: <u>Interact with members of the workgroup, supervision, and/or the public in a cordial, service-oriented manner.</u>

Level 2: Interact across department lines and with appointed City officials, and/or members of the public, at times under adversarial circumstances, in a cordial, respectful manner.

Level 3: Interact with appointed and elected City officials, department heads, representatives of external organizations, and/or the media in a cordial, effective manner.

Examples of Behavioral Indicators:

- Works well with others toward mutual objectives.
- Does not arouse hostility in others.
- "Disagrees without being disagreeable."
- Elicits acceptance/cooperation from others.
- Affords all individuals respect, regardless of their role or status.
- Effectively addresses concerns of politicians or others who may have their "own agenda."

Performance Levels:

<u>Satisfactory</u> <u>Superior</u>

Behaves in a courteous, respectful, cooperative manner toward co-workers, other City employees, and members of the public.

Facilitates positive interpersonal relations within/among workgroups and toward members of the public. Adept at finding similarities and grounds for cooperation/mutual benefit.