CLASSIFICATION TITLE: ENGINEERING AIDE II

BARGAINING UNIT: CIV BARGAINING  CODE NUMBER: 5720

PAY RANGE CODE: 0415  REVISION DATE: 8/31/17

NATURE OF WORK:

This is technical work involving the operation of survey instruments, the preparation and maintenance of records, performing mathematical computations, and performing drafting duties.

ESSENTIAL FUNCTIONS: (Any one position may not perform all the duties listed, nor do the listed examples include all the duties that may be performed in positions allocated to this class.)

Determines locations and elevations of construction sites by setting grade hubs to mark positions, and by locating bench marks, property lines, lot pins, and permanent reference markers.

Creates sketches as guides to drafting technicians and engineering designers.

Records survey field notes, using calculators to make mathematical computations.

Checks profiles for proper grade to ensure plans are implemented as drawn.

Reads and interprets construction plans, blueprints, maps, legal descriptions, and drawings.

Maintains field books, quarter section maps, and logs of time spent on projects.

Maintains regular job attendance in accordance with a schedule established for the position by the supervisor.

Performs other related duties as assigned or as the situation dictates within the scope of this classification.

REQUIRED KNOWLEDGE, SKILLS, AND ABILITIES:

Knowledge of and ability to operate a computer or other technology using standard or customized computer or systems software applications appropriate to the assigned tasks.

Knowledge of the materials, methods, and techniques involved in public and private street and sewer construction.
Knowledge of the use of transits, levels, and other engineering survey and drafting equipment.

Knowledge of algebra and trigonometry as applied to the computation of angles, areas, distances, and traverses.

Ability to plot profiles and cross sections and to prepare routine plans.

Ability to perform precise survey work, determine engineering computations, reduce field notes, and collate and record test data in a systematic manner.

Ability to understand oral or written instructions.

Ability to learn and adapt to advances in computer and electronics device technology and software.

Ability to adhere to safety policies, procedures, and guidelines.

Ability to establish and maintain effective working relationships with fellow employees and members of the general public.

Ability to stand and walk from 76 to 100% of the time; to bend and stoop from 51 to 75% of the time; to squat from 26 to 50% of the time; and to climb, reach, balance, crawl, push, pull, lift, type and sit up to 25% of the time.

Ability to move objects weighing up to fifty (50) pounds up to 33% of the time; objects weighing up to twenty (20) pounds from 34 to 66% of the time; and objects weighing up to ten (10) pounds from 67 to 100% of the time.

EDUCATION AND EXPERIENCE: (The knowledge, skills, and abilities above may be acquired through, but are not limited to, the following combination of education and/or experience.)

High school graduation or its equivalent

AND

Two (2) years of experience in land survey work of construction technology.

SPECIAL QUALIFICATIONS

Must possess a valid motor vehicle operator’s license.

WORKING CONDITIONS: (The conditions herein are representative of those that must be met by the employee to successfully perform the essential functions of the job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.)
Work is performed primarily in an office setting or outdoors in all weather conditions, at times amid high noise levels, near moving machinery or electric currents, in high places or confined spaces, in the presence of fumes and dust.

**EQUIPMENT OPERATION:** (Any one position may not use all of the tools and equipment listed nor do the listed examples comprise all of the tools and equipment that may be used in positions allocated to this classification.)

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<thead>
<tr>
<th>Computerized data collector</th>
<th>Transit</th>
<th>Level</th>
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<tr>
<td>Tripod</td>
<td>Plumb bob</td>
<td>Theodolite</td>
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<td>Two-way radio</td>
<td>Metal detector</td>
<td>Total Station</td>
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<td>Programmable calculator</td>
<td>Copier</td>
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<td>Survey van</td>
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<td>Electronic Distance Measuring Equipment</td>
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Previous Revision Date(s): 11/19/92