CONSTRUCTION INSPECTOR II

JOB DESCRIPTION

Classification Responsibilities: The Construction Inspector II is primarily responsible for performing quality assurance inspections and administering City contracts for a large-scale, high profile, high cost, or complex public works projects or similar development projects. The Construction Inspector II assists in the training of new inspection staff, serves as a field resource for both City staff and contractors or developers, and is the designated supervisor in the absence of the Construction Supervisor. The position performs related work as required.

Non-City Utility (NCU) Inspection Assignment: In addition to the duties listed above, an employee assigned to the private utility assignment will be responsible for inspecting various structures and construction projects in the rights-of-way for conformance with approved plans, specifications, inspections, and regulations; inspect concrete, pavement, and directional drilling; daily coordination activities with outside agencies and various City departments; meeting with private and public utilities on a regular basis to determine routes and location of new facilities based on factors such as preservation of City pavements, traffic impacts, and aesthetics of above ground equipment; coordinating joint trench opportunities; and conducting site inspections of overhead communications facilities to ensure outside plant facilities meet National Electric Safety Code (NESC) and other City requirements. Also, the employee assigned to the NCU assignment will review construction plans and specifications for conformance with Maricopa Association of Governments (MAG) and City specifications.

Distinguishing Features: In addition to being primarily assigned to large-scale or complex City or private public works projects, an employee in this class is required to use appropriate safety equipment and follow approved safety procedures in performing work assignments. The Construction Inspector II is expected to exercise initiative and independent judgment in performing quality assurance inspections and administering City contracts to ensure that all quality standards are met and that contract projects are completed in a timely manner with minimal extra costs. The Construction Inspector II is distinguished from the Construction Inspector I by being primarily involved in the administration of large-scale City projects or highly complex projects, by being designated as supervisor in the absence of the Construction Supervisor or directing the work of a contract inspector. The Construction Inspector II is distinguished from the Construction Supervisor primarily by the lack of full-supervisory responsibilities. This class is supervised by a Construction Supervisor or Right of Way Manager through meetings and reports concerning the status of assigned project(s), problems encountered, and overall quality standard compliance. This class is FLSA nonexempt.

QUALIFICATIONS

Employee Values: All employees of the City of Mesa are expected to uphold and exhibit the City's shared employee values of Knowledge, Respect, and Integrity.

Minimum Qualifications Required. Graduation from high school or GED. Any combination of training, education, and experience equivalent to five years of experience in any of the following areas: construction trades, construction management, construction inspections, civil engineering inspections, building inspections, and/or paraprofessional engineering OR two years' full-time employment with the City of Mesa as a Construction Inspector I.

Special Requirement. Must possess a valid Class D Arizona Driver's License by hire or promotion date. Due to the required access to all City buildings for this position, an individual receiving a conditional offer of employment from the City of Mesa must pass a background investigation through the City of Mesa Police Department, the Arizona Department of Public Safety, and Federal Bureau of Investigation prior to commencing employment with the City of Mesa to allow full, unescorted access to Police facilities ***(by assignment)***.

Substance Abuse Testing. Due to the safety and/or security sensitive nature of this classification, individuals shall be subject to pre-employment or pre-placement alcohol, drug and/or controlled substance testing as outlined in City policy and procedures.

Preferred/Desirable Qualifications. Experience involving inspection and final acceptance of contract work, contract administration, working with Non-City Utilities, or direct interaction with the public in resolving problems and complaints is highly desirable. Certification in a nationally recognized construction administration, construction quality assurance, or public works certification program, such as National Institute for Certification in Engineering Technologies (NICET) or American Public Works Association (APWA), is highly desirable.

ESSENTIAL FUNCTIONS

Communication: Coordinates contractor schedules and activities with other City departments whose services are needed. Records on plans as-built information such as the location of valves, sewer connections, manholes, water services, and irrigation pipe. Trains new inspection staff and serves as the field resource person for day-to-day questions and activities such as inspection techniques, interpreting engineering plans and specifications, scheduling materials testing, and contract administration principles and procedures. Initiates letter of acceptance or release of Certificate of Occupancy when all work meets specifications and standards. Coordinates and schedules lab testing, pressure tests, utility shutdowns, tie-ins, and valve exercising. Notifies other City departments when their facilities will be affected by construction. Communicates and verifies progress payment requests and computes final quantities item by item from the contract bid schedule on City contract jobs and special improvement district, in order to determine the amount of money to be paid to the contractor. Prepares clear and concise written reports. Coordinates work sequences and schedules with contractors, private sector utilities, and other City departments. Uses word processing, spreadsheet, and electronic mail software to prepare reports, give instructions, and analyze data.

Manual/Physical: Inspects City contract projects and/or private developer subdivisions to ensure an acceptable quality level and compliance with MAG specifications and standards in civil engineering and public works areas including, but not limited to: sewer installations including metering stations, lift stations, force mains, sulfide control stations, etc.; water installations including wells, pump stations, transfer stations, etc.; irrigation installations including tile, alfalfa valves, standpipes, gate structures, etc.; storm drain installations including catch basins, slotted drains, pipe, retention basins, etc.; electric, telephone, computer, and cable TV trenching, duct bank, and conduit installations; paving and concrete flatwork, including curbs, gutters, sidewalks, driveways, etc.; and bridges and structures. Lifts, carries, and pushes 100 pounds (example: five-gallon buckets of concrete, wheelbarrows full of concrete or aggregate base course, etc.) using assistive devices (example: cart, power winches, rigging equipment, etc.). Enters confined spaces such as manholes, pipelines, tanks, etc. Climbs structures (example: scaffolding) to twenty (20) feet above ground. Goes up in elevators, manlifts, and buckets fifty (50) feet above ground. Uses a shovel to locate valves, meters, etc. Turns a valve key to operate water valves,

fire hydrants, etc. Operates a City-owned pickup or sedan vehicle requiring a standard Class D Arizona Driver's License to inspect various assigned projects and attend field meetings. Works in a hot, dusty environment, often standing for periods of two (2) hours or more around construction equipment. Checks for City, County, Arizona Department of Transportation (ADOT), and Non-City Utility permits. Coordinates survey requests and staking prior to trenching. Monitors dust control and rough grade. Obtains soil samples for materials lab to test. Monitors trenching procedure for alignment and grade, shoring, and manhole locations for proper compaction. Inspects sewer for proper installation, obstructions, deflections (by lamping), and diameter deflection (by mandrel). Checks pipes, valves, and fire hydrants for compliance to MAG specifications. Obtains samples for high chlorine test for disinfection and low chlorine test for safe public consumption. Ensures reinforced pipe is used in right-of-way crossings and checks method of installation of backfill, bedding, and structures. Monitors conflicts with other utilities, approves source and type of concrete, and samples concrete (if cast-in-place pipe). Inspects pipe installation, pipe collars, and manhole bases for proper thickness and integrity of lining. Inspects landscape restoration to avoid complaints from property owners. Checks locations of junction boxes, power supplies, and transformers. Verifies proper location and inspects installation of piles, piers, drilled caissons, and other foundation structures. Inspects forms and falsework, rebar size and spacing, and cleanliness. Observes placing, vibrating, finishing, and curing of concrete. Inspects installed equipment for conformance to specifications. Inspects subbase and Aggregate Base Course (ABC) for grade, compaction, moisture, and preparation for paving. Inspects asphaltic and portland cement concrete paving for thickness, density, smoothness, and conformance to design. Inspects forms for curbs, gutters, and sidewalks; and ensures valves, manholes, and traffic loops are installed and adjusted prior to surface course paving. Inspects civil engineering projects within public rights-of-way and City owned property. Ensures proper barricading is provided and maintained per the City's barricade manual. Provides adequate access to businesses and residents to ensure a minimum of inconvenience and a maximum of safety to the public. Meets scheduling and attendance requirements.

Mental: Monitors trenching for location and depth, installation of locator tapes where cable parallels City utilities, and trench backfill and compaction to prevent trench failures. Monitors contractor's construction schedule, submittal of shop drawings and cut sheets, survey requests, and permits. Calculates material costs based on project plans and specifications. Calculates solutions to mathematical problems involving ratios and proportions, fractions, percentages, and basic algebraic, geometric, and trigonometric formulae. Coordinates and schedules lab testing, utility shutdowns, tie-ins, and valve exercising. Approves source and type of concrete and obtains samples, sample source, and schedules testing. Ensures permits are obtained and closed out when work is complete. Ensures joints, dowels, and reinforcing material conform to plans and specifications. Reads and interprets engineering plans, specifications and details, quarter section maps, and related engineering plans and drawings to ensure compliance with project plans and specifications to advise contractors or developers of changes necessary for compliance. Uses construction knowledge to conduct reviews of plans for projects being designed to identify potential constructability issues.

Knowledge and Abilities:

Knowledge of:

general civil engineering and public works practices including water and sewer main installation and testing, backfill type and compaction standards, paving subgrade standards, trench specifications, etc.;
Mesa Standard Specifications and Details;
MAG Standard Specifications and Details for Public Works Construction;

types and quality of materials generally used in civil engineering and public works projects;
standards, tolerances, finishes, and other indicators of quality workmanship and materials, general terminology, and mechanical drawing symbols used in civil engineering, public works plans, and details;
Mesa standards for public works projects;
testing and sampling procedures for construction materials and potable water;
employee training principles and practices;
general contract administration practices and procedures; and
computer software for word processing, spreadsheet analysis, and communication.

Ability to:

administer large-scale public works contracts;
authorize partial payments at various stages of project completion;
recommend approval of change orders for necessary work not anticipated specifically in the contract;
coordinate and conduct final inspection of work;
compile a punch list and monitor completion of punch list items;
read and interpret construction plans, specifications and details, utility maps, and related engineering and architectural plans and drawings in order to ensure compliance with project specifications;
inspect project work sites to ensure acceptable quality levels and compliance with MAG standards and City procedures and standards in civil engineering and public works construction;
inspect sub-bases and ABC bases for grade, compaction, moisture, and preparation for paving;
inspect asphaltic and portland cement concrete paving for thickness, density, smoothness, and conformance to design;
inspect forms for curbs, gutters, and sidewalks;
interact with contractors and construction personnel to ensure work activities and products meet required quality levels and standards;
analyze construction problems, determine possible solutions, and select the option which best resolves the situation while maintaining quality standards;
organize assigned inspection activities to minimize backtracking and increase efficiency;
check project for City, County, ADOT, and Non-City Utility permits;
coordinate work sequences/schedules with contractors, private sector utilities, and other City departments/units;
calculate solutions to mathematical problems involving ratios, proportions, percentages, and basic algebraic, geometric, and trigonometric formulas;
write correspondence;
prepare clear and concise written reports;
lift, carry, and push 100 pounds (example: five-gallon buckets of concrete, wheelbarrows full of concrete or ABC, etc.);
enter confined spaces such as manholes, pipelines, tanks, etc.;
climb structures (example: scaffolding) to twenty (20) feet above ground;
go up in elevators, manlifts, and buckets fifty (50) feet above ground;
use a shovel to locate valves, meters, etc.;
turn a valve key to operate water valves, fire hydrants, etc.;
work in a hot, dusty environment, often standing for periods of two (2) hours or more around construction equipment;
establish and maintain effective working relationships with supervisors, contractors, construction personnel, and coworkers; and
use computer software for word processing, spreadsheet analysis, and communication.

The duties listed above are intended only as general illustrations of the various types of work that may be performed. Specific statements of duties not included do not exclude them from the position if the work is similar, related, or a logical assignment to the position. Job descriptions are subject to change by the City as the needs of the City and requirements of the job change.

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RM/sb/eb

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EEO-Tech	IND-9410
JOB FCTN-TEC	SWORN-No
Non-DOT Safety and Security-Y	Non-DOT Random-N
CDL-N	DOT-N
RESP-N	INCREMENTS 64-200