

**MONTGOMERY COUNTY GOVERNMENT
ROCKVILLE, MARYLAND
CLASS SPECIFICATION**

**Code No. 003652
Grade 20**

CONSTRUCTION REPRESENTATIVE II

DEFINITION OF CLASS:

This is intermediate level construction monitoring work performed primarily in the field on building or highway construction sites of County Government Capital Improvement Program projects.

An employee in this class assures, on behalf of the County, contractor adherence to construction requirements (including construction plans and specifications, timelines and pertinent County, State and Federal requirements), standards (including generally-accepted construction practices) and quality (as specified in plans and in general) in the construction and/or major renovation or rehabilitation of County highways, bridges, buildings or similar structures under the Capital Improvement Program. Contacts are primarily with County Government personnel, state, federal and utility company representatives, engineers/architects of the design firm or the construction contractor, construction contractors, superintendents, crew chiefs, skilled trade workers and quality control personnel, as well as representatives of material production plants, suppliers and manufacturers. Contacts involve exchange of technical and administrative information pertaining to the construction of buildings, highways, bridges and other similar structures. Although contacts are generally of a cooperative nature, employees are frequently required to resolve job site issues arising from the interpretation of construction plans and specifications and contract documents. Depending on the project, the employee may serve as frontline project communicator with the public and have regularly recurring interface with property owners or residents, typically concerning work being done on rights of way bordering private residences, but including other types of construction and affecting businesses or commercial property.

An employee in this class is responsible for helping assure, by monitoring construction at the frontline, that assigned capital improvement projects for all-new construction and major renovations are accomplished effectively (i.e., consistent with plans, other requirements, standards, etc.), timely and safely, resulting in a final product that provides full measure of benefit to the County. This outcome is accomplished through daily observation, recording, reporting and correction of work activities at construction sites as well as by initiating and conducting tests to authenticate and validate that materials meet specifications. Because the supervisor may not be readily accessible and in order to facilitate maximum utilization of resources, the employees of this class work under general supervision and are empowered to authorize a limited range of field adjustments to plans and specifications. Judgment must be exercised in selecting substitute equipment, hardware or construction techniques, as well as determining the amount of oversight required on each active job-site. The work is reviewed through various means, including reports generated by the employee, recurring progress meetings and on-site supervisory visits, to assure effective monitoring of construction at the frontline. Although the guidelines for the work are extensive, the employees routinely use resourcefulness to modify or adapt the guides to situations requiring authorization of minor changes and/or approval of a prescribed range of changes in equipment, hardware or construction technique. The complexity of the work of the class is characterized by the need to analyze the issues involved or arising in each assignment, and

recommending or approving (as in field adjustments) a course of action be selected from many alternatives, based on experience, and the knowledge required to effectively monitor the activities of a diverse complement of skilled trades peculiar to building or highway construction and/or hazardous materials abatement. The work of the employees in this class has a direct impact on the proper, safe and timely construction of all building and highway projects conducted by or on behalf of the County. Significant is that undetected and uncorrected errors in the construction process have the potential to transcend into serious safety, building/highway performance and/or financial consequences. Work is performed primarily at construction sites, in the field, with exposure to adverse weather, or a construction trailer. In construction areas, employees are exposed to some risks, such as close proximity to moving traffic, moving or energized construction equipment, the construction activity itself, uneven terrain or constructed spaces, working on ladders or atop structures (with potential for falls) and possibility of falling construction materials, tools or debris, which require situational awareness, adherence to safety precautions and use of safety equipment such as hard hats, safety boots, ear plugs, eye protection and safety belts with lanyards and on occasion, may be required to be in confined spaces, which requires certification of confined entry training and the use of special safety equipment. The work involves sitting, standing, walking, pushing, pulling, lifting, carrying and other physical demands typical of people who work in the field and also perform administrative duties; effort includes standing for long periods, kneeling, stooping, bending and reaching to inspect areas and work located in trenches, roofs, framing, etc. and the use of ladders or scaffolding to view certain spaces or access building mechanical systems and the like.

EXAMPLES OF DUTIES: (Illustrative only)

- Studies and familiarizes self with the drawings and specifications of construction projects, documents observations and reviews findings with supervisors, contract writers or designers.
- Evaluates contractor proposals and advises supervisors of potential problems, cost and time considerations, utility placement and connection, selection and placement of equipment, choice of materials, stormwater management facilities, Americans with Disabilities Act compliance, etc. Alerts supervisor of potential for construction claims and recommends ways to avoid cost overruns.
- Inspects project site before construction begins to identify and report conditions that may affect contractor's ability to complete construction as specified.
- Establishes and maintains liaison throughout construction process with contractor's field representatives, subcontractors, material suppliers, utility company representatives, etc.
- Daily monitors projects under construction for compliance with code requirements and contract plans and specifications, including the quality control plan, to ensure that all work is performed as prescribed and within specified time requirements as well consistent with generally accepted construction practices. Performs inspections and prepares, or verifies, documentation required for quality control program.
- Tracks contractor requests for information about plans and specifications that must be answered by the project designer. As authorized and appropriate, personally handles or refers to the supervisor construction questions, conflicts or disputes as they arise.
- Based on experience, role in the project (on-site leader or assister) and other factors, may have and exercise authority to approve a range of field adjustments or field expedients. Resolves field construction problems as authorized, referring difficult issues and situations not covered by instructions, precedent or authority to supervisor for assistance.
- Maintains daily log for each assigned project, recording observations, findings, authorized changes, etc. and prepares and presents periodic status reports for each project.

- Investigates and reports on project scheduling issues or situations (e.g., work delays due to weather, utility problems, material shortages or material/supplier contraventions, insufficient persons on job-site, etc.), which may lead to subsequent formal claims by the contractor. Documents findings for use as a basis for determining if contract time or price adjustment is warranted.
- Monitors the removal of hazardous material (e.g., asbestos, leaking underground storage tanks, PCBs) from construction sites.
- Attends meetings with supervisors, consultants, and contractors to review construction progress, discuss problems/issues, offer recommendations, etc.
- Reviews and provides recommendations to supervisor regarding, or approves, contractor requests for progress payments, time extensions, cost overruns, material/ equipment substitutions, etc.
- Verifies the delivery of materials and equipment to construction sites, and coordinates, observes and reports on required tests (e.g., coring, concrete strength, elevators, life safety, etc).
- Conducts field or laboratory tests of materials (e.g., concrete, soil, aggregate, brick and hot mix asphalt) to determine compliance with mix designs, job mix formulas and/or project specifications and requirements.
- Provides recommendations, guidance, instructions, etc. to contractor's job superintendent, or in some cases, subcontractors, regarding plans, drawings and construction requirements. Notes changes in plans for preparation of "as built" drawings.
- Verifies and keeps records on "green building" materials and processes for LEED certification purposes.
- Coordinates, or helps coordinate, special third party testing for new structures, including but not limited to air and water balance, building and equipment grounding, functional performance testing, masonry inspections and structural steel inspections.
- Coordinates, or helps coordinate, the third party commissioning process by scheduling inspections by Commissioning Agent inspectors, working with and ensuring training of County maintenance personnel on new building systems, and performing related functions.
- Prepares comprehensive reports detailing major contractual or systems failures and provides recommendations for correction.
- Ensures contractors utilize proper safety precautions for pedestrians and motorists and minimize obstructions to traffic, adhering to the approved traffic plan (may recommend changes to it), the Manual of Uniform Traffic Control Devices and other regulatory requirements.
- May help train entry level County personnel.
- Stays abreast of changes in construction technology (materials and techniques) affecting the types of projects assigned, such as vertical construction or horizontal construction.
- Serves as frontline project communicator with the public by preparing, or helping prepare, and distributing mass communications using various media. Directly interacts with homeowner or business associations, homeowners, business owners and others concerning project purpose, status, utility service disruptions and other matters.
- Uses approved database(s) and common or specialized software to report observations, authorized changes and all other information needed for a fully documented project history, including time extensions, additional work requests, payments, retainage, liquidated damages and disputes.
- Performs related duties as required.

KNOWLEDGE, SKILLS AND ABILITIES:

- Knowledge of the standards and codes governing the construction of buildings, building systems, highways, roadways, bridges and other vertical or horizontal construction (including jobsite safety requirements), as dictated by the assignment; of common construction practices, methods, techniques, materials, costs, systems and equipment associated with the trades involved in vertical or horizontal construction, as dictated by the assignment; of common construction inspection practices; of documents and procedures commonly used by contractors in construction project administration; and of ‘green building’ documentation, as dictated by the assignment.
- Knowledge of common structural or civil engineering methods and techniques in practice, as dictated by the assignment; of site preparation and sediment and erosion control and stormwater management techniques and requirements; of material tests required (such as concrete tests, soil tests, water service tests and electrical service tests), how they are conducted and how to evaluate results; of mathematics, including algebra and geometry, to check layouts, calculate properties or costs, etc.; and of baseline aspects of construction scheduling methods, including fundamentals of progress schedules, Program Evaluation Review Technique charts and Critical Path Method schedules.
- Skill in problem solving to select, organize and logically process relevant information (verbal, numerical and ideational) to solve a problem. Examples include skill in interpreting construction engineering plans, specifications, drawings and related documents; maintaining accurate records of construction activity and preparing progress reports; reviewing contractor requests for progress payments, time extensions, equipment/materials substitutions, etc.; inspecting jobsite materials and workmanship for quality; and using equipment and tools, including transits and levels to check for elevation, plumb and square, a camera to document progress or problems, megohmmeters, ohmmeters, penetrometers, gas meters, torque wrenches, air entrainment meters, slump cones and sand cones to perform tests on site, and concrete compression machines, nuclear asphalt content determiners, and asphalt content reflux extractors to perform tests in a laboratory.
- Skill in oral communication to understand verbal information (including instructions, descriptions and ideas) and to express such information verbally so that others will understand. Examples include exchanging routine and non-routine project information with business contacts or the public.
- Skill in written communication to understand written information (including instructions, descriptions and ideas) and to express such information in writing so that others will understand. Examples include reading specifications, codes and equipment model numbers, reviewing project plans, recording inspection results, writing reports, etc.
- Interpersonal skills to interact effectively with business contacts or the public in a businesslike, customer service-oriented manner. Contacts include but are not limited County employees, State employees, employees in public utility companies or agencies, contractor employees, other private sector personnel and the public.
- Skill in the use of a computer for planning, scheduling, communicating (email), word processing, spreadsheets and other applications. Ability to use, and build skill in use of, project scheduling software (such as Primavera) or specialized databases, such as the Maryland Construction Management System (MCMS) database, may be required.

MINIMUM QUALIFICATIONS:

Experience: Five (5) years of experience in construction or inspection of (a) buildings and building electro-mechanical systems or (b) roads and accessory structures (storm drains, bridges, curbs and gutters, driveways, sidewalks).

Education: Completion of high school or High School Certificate of completion recognized in the State of Maryland.

Equivalency: An equivalent combination of education and experience may be substituted.

CERTIFICATIONS:

MCDOT Positions:

- Soils and Aggregate Technician and Hot Mix Asphalt Field Technician through the Mid-Atlantic Region Technician Certification Program (MARTCP).
- Concrete Field Testing Technician by the American Concrete Institute (ACI) or the National Ready Mixed Concrete Association (NRMCA).

LICENSE:

- Possession and maintenance at all times of a valid Class "C" (or equivalent) driver's license from the applicant's state of residence.

PROBATIONARY PERIOD:

Individuals appointed to this class will be required to serve a probationary period of six (6) months, during which time performance will be carefully evaluated. Continuation in this class will be contingent upon successful completion of the probationary period.

MEDICAL EXAM PROTOCOL: Core II Exam.

Class Created: June, 2000

Revised: February, 2001

August, 2009

April, 2010

August, 2013