



## Public Works – Highway, Engineering, Parks, Maintenance Shop

### Commissioner of Public Works

- Administers and oversees the activities of all sections of the County Department of Public Works;
- Supervises and coordinates the preparation of plans for the maintenance and repair of existing highway systems and bridges in the county and the design and construction of new roads, bridges, parks and waste disposal sites;
- Oversees and supervises the production of engineering designs and monitors the progress made on current department engineering projects;
- Studies need for, and recommends improvements to be made in, methods, techniques and equipment for all sections of the Department of Public Works;
- Oversees and supervises the preparation of the Department of Public Works budget and determines that necessary budget controls are maintained in correlation with approved planning programs;
- Develops and maintains the system of accounts for recording and monitoring expenditures in the Department of Public Works;
- Approves and is responsible for updating and insuring the carrying out of plans for snow and ice control programs on state and county roads;
- Directs the drawing of detailed engineering plans and, within available appropriations, employs special engineering, architectural or other technical counsel as necessary according to policies set by the county legislature;
- Directs all activities involving drainage, flood control, gravel and sand facilities, and waste disposal;
- Directs the performance of surveying and related services for the county and is responsible for the oversight of the construction of all public works capital projects whether designed and/or constructed by the county or by contractors of the county;
- Coordinates department highway and bridge activities with the activities of town highway superintendents and their departments in the areas of planning, designing, development and operation;
- Oversees the production and updating of the map of the county and town highway systems;
- As necessary, enters into contracts with public corporations or public authorities for the provision of public works services as approved by the county legislature.

### **Administration**

#### Senior Account Clerk-Typist

- Classifies a variety of receipts and expenditures, and distributes costs according to a prescribed code;
- Reviews and checks moderately-complex account keeping records and reports for arithmetical and clerical accuracy, completeness and proper extension;
- Assigns work, reviews and records work done, and instructs new employees in the specialized account keeping and clerical work of a unit;
- Receives remittances by mail or in person, verifies amount, computes interest and penalties, and posts to book of original entry or enters on computerized ledger;
- Posts to journal or ledger accounts from a variety of original entry media either manually or via data entry device;

- Prepares summary statements of ledger balances;
- Compiles payroll data, prepares, types and checks payrolls; Supervises the verifying and reconciling of individual account balances;
- Compiles, prepares and types labor, material and operational cost records and reports;
- Processes, types, sorts, indexes, records and files a variety of control records and reports.

#### Senior Account Clerk (2 Positions)

- Posts to journal or ledger accounts from expense and appropriation records and a variety of other original entry media;
- Classifies receipts and expenditures according to standard classifications and makes trial balances;
- Oversees the verifying and reconciling of a number of account balances according to a prescribed procedure;
- Prepares routine reports of information taken from journal or ledger;
- Compiles information for and prepares labor, material and operational costs records and reports;
- Issues receipts for deposits and issues refunds, writes vouchers and checks, and prepares deposit slips and makes deposits;
- Reviews and checks complex account keeping records and reports for arithmetical and clerical accuracy, completeness and proper extension;
- Processes, sorts, indexes, records and files a variety of control records and reports.

#### Senior Clerk (Vacant)

- Maintains personnel records and prepares payrolls;
- Collects and compiles statistics and other related information;
- Processes, checks, codes, and files requisitions, claims, vouchers, bills, and receipts;
- Processes, sorts, indexes, records, and files a variety of forms and other items such as control records and reports.

#### Account Clerk Typist

- Operates keyboarding equipment in the performance of the clerical duties;
- Posts to journal or ledger accounts from appropriation, expense, invoice, payroll, receipts, voucher records and other original media;
- Receives remittances by mail or in person, verifies amount, computes interest and penalties and posts to book or original entry;
- Assists in verifying and reconciling account balances according to prescribed procedures;
- Assists in reviewing and checking routine accounting records and reports;
- Compiles payroll data and/or prepares and checks payrolls;
- Operates a variety of office machinery and equipment.

### **Engineering & Bridge Shop**

#### Professional Engineer

- Responsible for oversight of Engineering and Bridge Shop operations;

- Oversees and directs the engineering design, survey inspection and certification of rural bridges in the county including the personal performance of tasks in these areas;
- Furnishes to the New York State Department of Transportation all required documentation regarding bridge certifications;
- Supervises the work of the engineering staff on particular projects as required to insure proper adherence to specifications, procedures, etc.
- Coordinates and/or personally performs field inspections of county bridges, highways, and buildings used by the department;
- Oversees and directs field survey work on roads and bridges, including right of way layouts;
- Personally performs and/or directs and coordinates various engineering consultant activities for the department;
- Assists local officials and deals with the public concerning engineering problems relating to rural highways and bridges in the county;
- Assists in the determination and preparation of road designs and the conduct of field inspections of road construction and reconstruction projects.

#### Associate Engineer

- Performs surveys and engineering layouts;
- Supervises the design and drafting of highway maps and plans;
- Supervises field survey crews engaged in establishing line and grade, taking levels, performing topographical surveys, and measuring county land;
- Supervises drafting of right of way maps and prepares right of way deed descriptions;
- Supervises the preparation of flood and disaster damage estimates and reports and acts as liaison between Federal, State and local officials in the preparation and filing of claims for reimbursement;
- Inspects work performed by construction, repair and maintenance crews;
- Assists local officials with the solution of drainage, sight distance, curve easements, grades, and other highway problems;
- Assists Town Superintendents with budgeting, mileage reports, and other matters;
- Prepares and maintains a variety of records and reports.

#### Bridge Project Quality Control Technician

- Operates surveying instruments in the field for layout and site surveys for bridge and culvert projects;
- Performs basic technical field computations in connection with the reduction of field survey notes;
- Collects and records as-built information for all bridge projects and makes reports of this information;
- Inspects details of bridge and culvert construction projects to insure that all work is performed in conformance with plans and specifications and makes reports of such inspections;
- Performs field-testing of concrete in accordance with American Concrete Institute's standards and makes reports of these tests;
- Assists in coordinating utility relocations at bridge and culvert construction sites;
- As required and as time permits, performs duties of a Bridgeworker;
- Operates vehicles, instruments, equipment, and radios as required in the work.

### GIS Technician

- Assists the GIS Coordinator in developing and maintaining the computerized Geographic Information System for county departments involved in areas such as public works, industrial development, natural resources, comprehensive planning, physical and natural features, land use, public health, and tax parcel data;
- Performs data entry of geographic related material and maintains inventories of digital map files, digital base coverage information, associated database attribute files, and GIS program files;
- Personally prepares a variety of graphic materials such as thematic maps, statistical data, plans, charts, records, and reports;
- Analyzes county GIS applications and needs and assists county departments in defining departmental goals and objectives for integrated analysis of spatial and non-spatial data;
- Assists in developing training materials;
- Trains county staff and other users in GIS analysis and retrieval techniques.

### CAD Specialist

- Utilizes a variety of computer aided design and drafting equipment for the preparation of bridge drawings, construction drawings, as built drawings, and preliminary drawings;
- As directed, prepares a variety of drawings for the landfill division of the department;
- Operates a personal computer to update information contained in bridge files, to update and compile lists of materials, to perform plottings, etc.;
- Assists in the preparation of reports generated on/by the department's personal computers;
- Assists in administration of contracts entered into by the department and monitors progress towards completion;
- Assists in the performance of a variety of sub-professional engineering tasks as time permits and as directed;
- Makes routine office computations in connection with the reduction and plotting of field notes of surveys and checks extensions of computations;
- Performs routine drafting duties such as transferring level and cross section notes to plan and profile sheets, drawing in grade lines established by an engineer and completing the plans by inking and lettering;
- Performs drafting and tracing of property maps and prepares map indices;
- As required, operates surveying instruments in the field.

### Bridge Worker Supervisor (3 Positions)

- Oversees and directs the work of subordinates engaged in, and personally participates in, the construction, refurbishing and maintenance of steel, concrete and wooden bridges and multi-plate shells;
- Supervises and participates in the safe and efficient operation of bridging equipment such as cranes, welders, trucks, earth-moving equipment, torches, air-powered equipment and hand tools;
- Works with and oversees the work of subordinates in daily operations of welding, burning, building, stripping and cleaning of forms and in the pouring of concrete;

- Oversees and schedules preventive maintenance of all bridge-related equipment.

#### Senior Bridge Worker (2 Positions)

- Operates heavy motor equipment in the construction, refurbishing and maintenance of steel, concrete, and wooden bridges to include 35 ton crane, track hoe, dozer, etc.;
- Performs preventive maintenance on and repairs heavy motor equipment utilized in bridge construction;
- Performs professional welding on bridges as required;
- May exercise supervision over the work of Bridge Workers engaged in welding and carpentry in the absence of the Bridge Worker Supervisor; and
- May operate 17 and 35 ton cranes with clam bucket, drag line, and drop hammers and hook attachments.

#### Bridge Worker (5 Positions)

- Performs skilled welding and carpentry and other tasks in the construction, refurbishing and maintenance of steel, concrete and wooden bridges and multiplate and boiler shells;
- Welds, burns, drives sheet piling and rails, and fabricates steel bridges;
- Builds forms for toe walls, footers, abutments, wing walls, check dams, retaining walls and deck slabs;
- Disassembles and cleans forms and materials;
- Assembles pre-fabricated wooden bridges;
- Learns to operate heavy motor equipment used in bridge work such as cranes and earth moving machines;
- Performs preventive maintenance on and repairs bridge equipment such as cranes, trucks, welders, compressors, etc.
- Reads blueprints and layouts and uses level gun, transit and hand level.

#### Junior Bridge Worker (8 Positions)

- Assists with routine tasks in the construction, refurbishing and maintenance of steel, concrete, and wooden bridges and multi-plate and boiler shells;
- Learns to perform skilled welding and carpentry tasks in the construction, refurbishing and maintenance of bridges as part of an apprenticeship program;
- Operates a variety of electric and air power tools utilized in bridge work including saws, drills, grinders, jack hammers, rock drills, sand blasters, etc.;
- Assists in welding and burning, the driving of sheet piling and rails, and the fabricating of steel bridges;
- Assists in the building of forms for toe walls, footers, abutments, wing walls, check dams, retaining walls and deck slabs;
- Assists in the disassembly and cleaning of forms and materials;
- Assists in the assembly of pre-fabricated wooden bridges;
- Under close supervision, learns to operate heavy motor equipment such as cranes, track hoes, and dozers.

## Highway

### Deputy Commissioner

- Assists the Commissioner of Public Works in planning and administering highway and bridge construction and maintenance activities;
- Oversees research projects to determine public works construction and maintenance costs;
- Makes reports and advises the Commissioner of Public Works on all department problems;
- Supervises the preparation of project plans and methods of work as assigned;
- In conjunction with the Commissioner, oversees the activities of workers and equipment in snow removal and in sanding operations;
- As assigned, requisitions public works construction materials and machinery;
- Assists in the preparation of the budget for the Department of Public Works;
- Conducts inspections and analyses of bridges, roads and paving jobs;
- Supervises requisitioning of supplies for shops;
- Performs a wide variety of administrative and office tasks for the department.

### District Supervisor

- Coordinates and oversees the activities of Working Supervisors, Motor Equipment Operator Supervisors, Heavy Motor Equipment Operators, Motor Equipment Operators, and Laborers, and the proper utilization of materials and equipment, in the construction and maintenance of county roads;
- Oversees snow removal and ice control activities on state and county roads in an assigned district of the county;
- Assists in coordinating the use and distribution of equipment between the various construction and maintenance projects and in snow and ice control activities;
- Assists in planning construction and maintenance schedules and workloads;
- Participates in the preparation and maintenance of activity reports;
- Oversees the preventive maintenance and minor repair of both highway equipment assigned to district and also Department of Public Works buildings located in district;
- Inspects all county roads in the district for problems needing correction involving signs, patching, repairs, culverts, bridges, shoulders and trees.

### Highway Construction Quality Control Technician

- Oversees the work of contractors performing highway construction and reconstruction projects;
- Monitors and inspects work being performed to insure that it conforms to specifications;
- Plans and coordinates the work schedules of whatever Department personnel are assigned to work in quality control for particular projects;
- Provides technical assistance as needed to Highway Division personnel to insure that projects are completed according to specification;
- Assists superiors with the Department's annual Highway Program planning;

- Inspects cost records for projects to protect against cost overruns;
- Assists the engineering division with the preparation of highway construction plans and specifications;
- Operates surveying equipment and other equipment utilized in inspection activities.

#### Motor Equipment Operator Supervisor (8 Positions)

- Plans, sets up, and oversees the activities of workers engaged in both major and minor road construction and maintenance projects, as well as the removal of snow and ice in winter;
- Schedules and oversees the activities of employees and equipment used on specific jobs;
- Leads in road maintenance activities and operates highway equipment as required in the performance of the work;
- Oversees preventive maintenance program for equipment under his/her charge;
- Instructs subordinates in the observation of sound safety practices both in the shop and at work sites and enforces compliance with same;
- Oversees the activities of workers engaged in the excavation of culverts, ditches and back slopes;
- Coordinates the ordering and stockpiling of needed materials;
- Prepares time sheets for employees and utilization reports of equipment;
- Evaluates the work of subordinates and instructs and disciplines as required.

#### Heavy Motor Equipment Operator (16 Positions + 1 Vacant)

- Operates a tractor-trailer, bulldozer, loader, gradall, grader, roller, power shovel, crane, and other heavy automotive equipment in the performance of rural highway construction, maintenance, and repair activities or in the performance of tasks such as the moving and covering of fill at a landfill site;
- Operates a variety of trucks in connection with the removal of snow and in the transportation of stone, gravel, supplies, and other materials;
- Operates a heavy snowplow in the clearing of roads and streets;
- Operates a variety of heavy equipment in connection with cutting banks, digging and filling ditches, removing stumps, stripping gravel pits, and performing other related tasks;
- Fills and grades roads and spreads gravel with a power grader or bulldozer;
- Performs a variety of routine manual tasks such as loading trucks, digging ditches, cutting trees and brush, cleaning culverts, raking blacktop, and cleaning the shop;
- May supervise subordinate employees on work projects as specific tasks require and/or in the absence of supervisors.

#### Motor Equipment Operator (42 Positions + 2 Vacant)

- Operates a truck for application of sand/salt on icy roads; for the transportation of stone, gravel, supplies, and other materials; and for the removal of snow, brush, refuse, and other items associated with public works activities;
- Operates a truck or tractor with snow loader, snow plow, or other attachment;
- Operates light automotive equipment such as loaders and backhoes used in road, street, and rural highway construction, repair, and maintenance activities;

- Cleans streets with a power sweeper;
- Operates a variety of auxiliary equipment including compressors, cement mixers, stump cutters, post hole diggers, chippers, and chain saws;
- Performs preventive maintenance on vehicles and equipment and maintains it in a clean, job-ready condition;
- Performs a variety of manual labor tasks such as loading and unloading trucks, digging ditches, cutting trees and brush, flushing sewers, cleaning culverts and catch basins, and raking blacktop;
- Operates mowers in the cutting of grass or brush from roadsides and public places;
- Operates a bulldozer, grader, backhoe, or other heavy automotive equipment as assigned.

#### Laborer (2 Positions)

- Assists in patching and grading streets and roads;
- Rakes, shovels, and tamps asphalt;
- Assists in the treatment of highways with oil and stone;
- Shovels and otherwise assists in the removal of snow from streets, sidewalks, parks, and recreational areas;
- Sands and salts streets and roads and works as wingman on heavy-duty snow plows;
- Loads and unloads trucks with materials, supplies, tools, equipment, etc.;
- Assists in excavation and backfills for construction and repairs;
- Performs unskilled work in connection with the painting and maintenance of signs and bridges;
- May drive light trucks, vans, and up to 1-ton dump trucks utilized in the work and to transport supplies and materials.

#### **Parks**

##### MEO Supervisor

- Plans, sets up, and oversees the activities of workers engaged in maintenance of County parks;
- Oversees preventive maintenance program for equipment under his/her charge;
- Instructs subordinates in the observation of sound safety practices both in the shop and at work sites and enforces compliance with same;
- Oversees and participates in maintenance of park equipment, roads, and grounds;
- Prepares time sheets for employees and utilization reports of equipment;
- Evaluates the work of subordinates and instructs and disciplines as required.

##### Building Maintenance Mechanic

- Oversees and/or personally performs repairs to plumbing, steam lines, electric wiring and related equipment, furniture, doors and windows, hardware and varied mechanical equipment and machinery;
- Repairs pumps, switches, blowers, generators, programmable logic controllers, and meters;
- Performs skilled carpentry and painting work;

- Oversees and takes part in ordinary building cleaning operations;
- Makes inspections of property to ascertain repair needs;
- Estimates materials required for repairs;
- Keeps daily time and material records.

## **Machinery Shop**

### Machinery Shop Supervisor

- Oversees and inspects the repair of heavy automotive equipment such as automobiles, trucks, tractors, street sweepers, power graders, power shovels, and other road repair equipment;
- Oversees the operation of machine shop equipment, such as lathes, welding equipment, and other machine equipment used in the shop;
- Checks specifications and/or deliveries of automobiles, trucks, tractors, sweepers, and other departmental equipment;
- Directs the repair of automotive equipment breakdowns on the road;
- Assigns specific tasks to Automotive Mechanics and other workers in the repair of equipment;
- May repair or assist in the repair of equipment as necessary.

### Assistant Machinery Shop Supervisor (Vacant)

- Assists in overseeing and inspecting the repair of heavy automotive equipment such as automobiles, trucks, tractors, street sweepers, power graders, power shovels, and other road repair equipment;
- Oversees the operation of machine shop equipment such as lathes, welding equipment, and other machine equipment used in the shop;
- Assists the Machinery Shop Supervisor in determining parts to be used;
- Checks specifications and/or deliveries of automobiles, trucks, tractors, sweepers, and other departmental equipment;
- Assists in directing the repair of automotive equipment breakdowns on the road;
- Assigns specific tasks to Automotive Mechanics and other workers in the repair of equipment;
- Informs the Machinery Parts and Service Manager regarding specific parts needed to accomplish equipment repair;
- May repair or assist in the repair of equipment as necessary.

### Automotive Mechanic (12 Positions)

- Performs skilled operations in making general repairs on gasoline and diesel motor equipment such as trucks, tractors, hydraulic excavators, graders, bulldozers, rollers and compressors;
- Grinds valves and fits new bearings, pistons and rings;
- Adjusts connecting rods and bearings;
- Assembles and times engines;

- Repairs, overhauls, or replaces brake systems, differentials, transmissions, front and rear axles, springs, wheel bearings, clutches, pumps, carburetors, etc.
- Repairs ignition systems, generators, regulators, etc.;
- Straightens and welds frames and fenders;
- Operates machine shop equipment, including lathes, grinders, drill presses, and other metal working machines to make and repair parts for automotive equipment;
- Maintains simple records of parts and supplies used and assists in preparing requisitions.

#### Inventory Aide

- Develops and maintains purchasing records for the Machinery shop, including requisitions, purchase orders, and vouchers;
- Prepares fixed asset information for the required audit procedures;
- Develops and utilizes computer skills necessary to update and maintain the fixed asset files or other inventories as necessary;
- As required, may assist with preparation of bid specifications and in the general clerical work of the department.

#### Stock Clerk

- Receives, checks, stores and issues supplies, tools, and equipment
- Checks incoming supplies and equipment against bills, vouchers and requisitions to insure proper receipt before approval for payment;
- Prepares and maintains stock control records and reports;
- Prepares and maintains cost records and reports of public works projects involving the cost of operating equipment and the use of materials;
- Prepares and maintains activity and time records, reports, and payrolls;
- Prepares purchase requisitions and orders supplies from catalogs and maintains a perpetual inventory.