

WILLIAM J. DAWSON

EDUCATION

B.S., Civil Engineering, University of Maine, 1980
Courses in Business Management, Harvard University Extension Program
Course in Industrial Waste Treatment, University of Maine (ITV)

PROFESSIONAL REGISTRATION

Professional Engineer - Maine 1987, #5754

Massachusetts Professional Builders License (1981)

Maine Wastewater Treatment Plant Operator – Grade I (1980)

Maine Water System Operator – Class 1 (2000)

AFFILIATIONS

American Water Works Association

New England Water Works Association

EMPLOYMENT HISTORY

Earth Tech, Inc., Formerly Whitman & Howard, Inc.
Camp Dresser & McKee, Inc.
The Green Construction Company

PROFESSIONAL SUMMARY

Mr. Dawson has 24 years of experience on a variety of environmental engineering projects including the study, design, permitting, construction and start-up of environmental infrastructure facilities. Projects have included pumping station design and rehabilitation, comprehensive water planning studies, treatment plant design, dam and spillway rehabilitation and permitting, and remedial action master plans. In his present position, he is responsible for the design of water treatment facilities, pump stations, and transmission and distribution systems. He has also prepared water supply and distribution studies, facilities plans, and rate studies.

Previously, he was a Vice President of Infrastructure Services and a Senior Project Manager with Earth Tech, Inc, formerly Whitman & Howard, Inc. in the South Portland office for over 11 years, and he also worked at the Boston and New York City offices of Camp Dresser & McKee for more than 5 years. In this capacity, he was responsible for combined sewer overflow studies, sewer system evaluations, wastewater facilities plans, distribution system modeling, and remedial-action master plans for hazardous waste sites. In addition, he designed water supply facilities, pumping stations, and transmission pipelines.

Mr. Dawson has performed the engineering and management for 17 water system master planning studies for systems which include the Boston Water & Sewer Commission System, the

Kittery Water District System, the Yarmouth Water Districts (Maine and Massachusetts), the City of Newburyport, Massachusetts and the Camden-Rockland division of Consumers Maine Water Company, to name a few. He also performed quality assurance/quality control duties for many more studies.

PROFESSIONAL EXPERIENCE

- **Smith Farms, Westfield, Maine.** Mr. Dawson was the project engineer for a 0.5mgd ultra violet light (UV) disinfection system to treat make up water for ice making at a broccoli packing facility. His activities included the study, design and construction administration.
- **Tenants Harbor Water District, Tenants Harbor, Maine.** Mr. Dawson was the project engineer and manager for a project which included expert witness testimony with the Maine Department of Environmental Protection, the study design and construction administration phases of a project which implemented the installation of a 50gpm ion exchange package filtration system for iron and manganese removal.
- **Lisbon, Maine.** Mr. Dawson has been the project engineer and manager for several projects which have been a major upgrade to the Town's wastewater treatment facilities. He has performed the study, design, procurement and construction administration phases for the projects. They are as follows: switching from gas to liquid chlorination system, installation of fine bubble membrane aeration system including three 1,200 SCFM blowers, the installation of a 3,000 g centrifuge for residuals dewatering; the renovation of 5 pump stations and the replacement of two others, the lining of 600-feet of sewer, and the construction of a 2.025mgd headworks for grit and screenings removal.

Mr. Dawson was Project Manager for the design and construction phase engineering contracts of a 200-ft dual 10-inch diameter polyethylene long river siphon and the upgrade and renovation of a 1.5 MGD pumping station. The upgrade included starters, controls, motors, pumps and piping.

Mr. Dawson was the project manager for design and construction phase engineering services relative to the site work associated with the Farwell Mill renovation project. The work included a hazardous waste site closure plan, a parking lot design, and a drainage plan including infiltrators and an outfall.

- **Glatfelter, Ecusta, North Carolina.** Mr. Dawson was the project engineer for the design of two pump stations for storm water and leachate pumping to the aerated stabilization ponds for treatment. The storm water pump station included auxiliary power and pumps capable of 1,500gpm.
- **Livermore Falls Water District, Livermore Falls, Maine.** Mr. Dawson was the project engineer and manager for a project which included the value engineering of a Comprehensive Water System Planning Study, the design and construction of 22,000-feet of water main replacement, a pumping station retrofit, and the installation of 2 pressure reducing valve stations. The project was funded by Rural Development Agency loans and grants totaling \$2,175,000.00.

Mr. Dawson was the project engineer for the study, design and construction administration of a 1.0mgd slow sand potable water treatment facility.

- **Jay, Maine.** Mr. Dawson was the project engineer and manager for a project which included the replacement of 2,000-feet of sewer, 1,200-feet of drainage and the reconstruction of 5,000-feet of roads.

Mr. Dawson was the project manager for the renovation and upgrade of a wastewater treatment facility. The project includes a new package treatment unit, pumping station, and administration building. This project was bid as a combined bid with the Livermore Falls Wastewater Treatment Facility Project.

- **Farmington Village Corporation, Water Department, Farmington, Maine.** Mr. Dawson was the project engineer and manager for a project to replace a floating membrane cover for a 7.0 million gallon in-ground reservoir.
- **Hartland, Maine.** Mr. Dawson was the project engineer and manager for a project which included the design and construction of a potable water filtration facility. Two 250gpm wells were installed and then treated by an ion exchange package filtration system. The project also included chemical addition, a 20,000 gallon clearwell, a backwash equalization tank with a pump station and 2,000-foot long 4-inch diameter force main for the disposal of backwash wastewater.
- **Fraser Papers, LTD, Madawaska, Maine.** Mr. Dawson was the project engineer for a project to replace the paper mill's 30.0mgd wastewater treatment facilities outfall pipe and diffuser system. The project included the study, permitting, design and construction administration. The US EPA Cormix model was used for modeling the effluent entering the Saint John River. Several major challenges were protection of the diffuser pipe from ice and floatation due to entrained foam.
- **Dixfield, Maine.** Mr. Dawson was the project manager and engineer for a Comprehensive Water System Planning study. The study included a \$1,800,000.00 improvement program to make necessary improvements to their aging infrastructure system.
- **The October Corporation, New Gloucester, Maine.** Mr. Dawson was the water resources engineer for a project at the Pineland Complex. The project included the study, design and construction administration of improvements to the supply, storage and water distribution facilities. He was also responsible for the installation of over 10,000 feet of water main, a new 400gpm well and water treatment facility and renovations to the 0.5 million gallon steel tank. Mr. Dawson was also the operator of the system during the construction.
- **Guilford-Sangerville Water District, Guilford, Maine.** Mr. Dawson was the project manager and engineer for a Comprehensive Water System Planning study. The study included a \$1,100,000.00 improvement program to make necessary improvements to their aging water infrastructure facilities.

Mr. Dawson also designed and oversaw the construction administration for 4,400 feet of 12-inch diameter water main replacement. This project was funded by the Department of Economic and Community Development. He worked closely with the Maine Department of Transportation to layout the replacement facilities.

- **Walpole, Massachusetts.** Mr. Dawson was the Project manager for the study, design and construction of a 4.0-MGD water treatment facility for the Town of Walpole. The facility provides treatment for seven wells located in the School Meadow Brook Aquifer.

The treatment includes pH adjustment - greensand filtration – and packed tower aeration for iron, manganese, radon and VOC removal. this system will allow the Town to comply with the lead and copper rule. The project also included the excavation and removal of over 12,000 tons of petroleum contaminated soils, the cleaning of over 6,000 feet of 16-inch water main, and the installation of approximately 4,000 feet of 12- and 16-inch water mains.

- **Gardiner Water District.** Mr. Dawson was the Project Manager for the Gardiner Water District projects which include several studies and the design and construction management services for a 2.0-MGD greensand, iron and manganese removal water treatment facility (WTF) with aeration and chemical addition for corrosion optimization. The WTF is built on top of an existing concrete clearwell which was built around 85 years ago. The project was the first Maine SRF construction management project funded.
- **Brunswick-Topsham Water District.** Mr. Dawson was the Project Engineer for a design which retrofitted a two-stage pumping process diatomaceous earth filtration plant into a one-stage pumping intermittently regenerated greensand filtration process. The design incorporated a 3.5-MGD process including renovations to the pumping station; the existing chlorine gas, disinfection system, an addition to the existing pumping station, a new pump and motor, a variable frequency drive, five 12-foot-diameter greensand pressure filters, and a complete control package.
- **Old Town Water District.** Project Engineer for the study phase of a treatability study for the Spring Street Wellfield. Although all three of the wells are within 200 feet of the Stillwater River, the study was able to prove the case that they were not under the direct influence of the river before the regulations were adopted. Mr. Dawson was then project manager for the design and construction phase services for the Old Town Water District supply improvements. The improvements include the rehabilitation of three gravel packed well pumping stations, and the design and construction of a greensand pressure filtration water treatment plant. The treatment plant includes disinfection by sodium hypochlorite, fluoridation, corrosion control by lime addition, and four 12-foot-diameter pressure filters.
- **Wilton, Maine.** Project Manager of the study, design and construction phase of several water works projects for the Town of Wilton. The study phase of the Surface Water Filtration Rule Alternatives Study included four pilot plant studies and an economic analysis of five separate alternatives to comply with the new federal regulations. Based on the study, the Town embarked on a 3.3-million dollar water system improvement program which was totally funded by the Farmers Home Administration with over 40 percent grant funding. The Town built a new 1.0-MGD water treatment facility, a 1-MG reservoir and more than one-half a mile of transmission piping.
- **Aqua Maine Water Company.** Mr. Dawson is involved in a general consulting agreement for the Consumers Maine Water Company. In this role he is called on for hydraulic, mechanical and water quality issues. He has been involved with their properties in Camden-Rockland, Millinocket, Greenville, Oakland, Skowhegan, Freeport and Hartland. At several of these properties hydraulic pigging of transmission mains has been recommended and implemented.
- **Livermore Falls, Maine.** Mr. Dawson was the Project Manager for the renovation, upgrade, and expansion of a wastewater treatment facility. The project includes the

doubling of the plant capacity while reusing all of the existing plant tanks. This was done by adding trickling filters and secondary clarifiers.

- **Kennebec Water District.** Mr. Dawson was the Project Engineer for a project done in coordination with the Maine Department of Transportation. The project included relocating 600 linear feet of 30-inch water transmission main and replacing 1,800 feet of 20-inch pipe with 24-inch pipe. In addition to this the project also included over 3,000 feet of 12-inch pipe and a new river crossing.
- **Kittery Water District.** Mr. Dawson was the Technical Project Manager for contract operations of a 5-MGD conventional water treatment facility. The facility has the first ABW filters in the State of Maine.

Project Manager for the design and construction of a 1.8-MG prestressed concrete water storage facility, three valve vaults and upgrade to the supply pumping station including installation of variable frequency drives.

Mr. Dawson was the Project Engineer for a water system study that provided a Capital Improvement Program for the District. The system study included field testing, a field inspection program, a computerized hydraulic model, a supply analysis and a storage analysis.

Mr. Dawson was the Project Manager and designed a 3,200-foot replacement of (2) 12-inch unlined water mains with a 16-inch lined ductile iron water main. The project was done in conjunction with the rebuilding of the roadway by the Maine Department of Transportation.

- **Bath Water District.** Mr. Dawson assisted with the design of 18,000 feet of transmission and distribution piping, and a 1.1-MG post-tensioned water storage facility.
- **Jay Village Water District.** Project Manager and the Design Engineer for the 620,000-gallon steel storage facility. His responsibilities included design, contract development and negotiations with the Pittsburgh-Des Moines company.
- **Boston Water and Sewer Commission.** Mr. Dawson was the Assistant Project Engineer for a Water Facilities Master Planning Study for the BWSC. The study included a corrosion study, a conservation study, a water demand analysis, an hydraulic analysis, and a computer-based geographic “work order” and “inventory” system.
- **Bath, Maine.** Mr. Dawson assisted with the design of a dewatering facilities upgrade for the Bath Wastewater Treatment Facility. His responsibilities included piping, grinders, polymer system and double-disc sludge pumps. The dewatering facilities design also included two belt filter presses, conveyors, a pug mill, and a lime silo.
- **Farmington, Maine.** Mr. Dawson assisted with the design of effluent filters as part of the enhanced secondary treatment plant upgrade for the Farmington, Maine wastewater facility.
- **Berlin, New Hampshire.** Project Engineer for an aeration system evaluation study. The scope of the study included evaluation of an existing fine bubble ceramic diffuser system. He also evaluated membrane diffusers, positive displacement blowers and analytical and control equipment.