

BACKGROUND

2007-Present
Vice President
Weston & Sampson

2002-2007
Project Manager/Team
Leader
Weston & Sampson

2000-2002
Project Director
Earth Tech, Inc.

1990-2000
Principal Engineer
Maguire Group, Inc.

1987-1990
Project Engineer
Orsine Cotter Carson, Inc.

EDUCATION

1986
Bachelor of Science
Civil Engineering
University of New Hampshire

PROFESSIONAL REGISTRATIONS

Professional Engineer
Connecticut No. 17476
Massachusetts No. 46406

PROFESSIONAL SOCIETIES

Associates Committee,
Connecticut American Water Works
Association
Prospect, Connecticut

American Society of Civil Engineers

American Water Works Association

Water Pollution Control Authority

Water Environment Federation

New England Water Environment
Association

National Society of Professional
Engineers

Chris, vice president and regional manager of Weston & Sampson's Connecticut office, has over 30 years of civil engineering experience. He offers expertise in the planning and design of municipal wastewater collection systems, pumping stations, and wastewater treatment facilities, and provides guidance and oversight for numerous engineering and design projects in western Massachusetts and Connecticut.



SPECIFIC PROJECT EXPERIENCE

Industrial Stormwater Permitting, Prospect, Connecticut. Principal-in-charge of the stormwater sampling and permitting services as it relates to the Prospect Town Garage and Prospect Recycling Center in order to aid the town in maintain compliance with the industrial permit.

Industrial Stormwater Permitting, Thomaston, Connecticut. Principal-in-charge of stormwater sampling and permitting services as it relates to the Thomaston Municipal Garage and Thomaston Transfer Station in order to aid the town in maintain compliance with the industrial permit.

Stormwater Monitoring for Park Taylor Road Construction, Enfield, Connecticut. Principal-in-charge for the completion of monthly stormwater monitoring to fulfill the requirements of the Permit for Discharge of Stormwater and Dewatering Wastewater for construction activities.

Stormwater Pollution Control and Countermeasures (SPCC) Plan, Thomaston, Connecticut. Served as principal-in-charge providing contract review and administrative services for the town's Department of Public Works.

MS4 Services, Thomaston and Prospect, Connecticut. Oversaw the services required to help the town maintain compliance with the 2016 Connecticut General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4) Reissuance with Modifications.

Municipal Separate Storm Sewer Systems (MS4) Permit Registration and Stormwater Mapping, Orange, Connecticut. Providing services required to help the town maintain compliance with the MS4 permit, including dry weather outfalls screening, wet weather outfall screening, and stormwater mapping. Principal-in-charge of the field investigations and GIS mapping of more than 2,500 storm drainage pipes, catch basins, manholes, and outfalls town-wide using the ArcGIS application installed on iPads.

Cambridge Crossing Multi-Use Residential Development, Simsbury, Connecticut. Principal-in-charge for this project involving roadway design and site layout of 88 residential units (single family, duplex, apartments), parking layout, stormwater management and low impact development (LID) systems design, utility (sewer, water, gas, electric) systems design, phases erosion and sedimentation control design, and local and state permitting.

Linden Street School Demolition, Plainville, Connecticut. Principal-in-charge of the design of a new parking area, driveway connection, parent drop-off, sidewalks, stormwater management, site lighting, contract documents, and construction administration.

Wettish Property Athletic Fields, Killingworth, Connecticut. Principal-in-charge for this project involving the design of multiple athletic fields, parking layout, stormwater management and field underdrain design, and local land use permitting.

Commons Court Roadway, Waterbury, Connecticut. Principal-in-charge for the design of 1,700 linear feet of new municipal road and sidewalk, new intersection and traffic improvements, storm drainage, utilities, stormwater quality, and erosion and sedimentation control measures.

Stormwater Planning and Permitting Assistance, Various Locations, Massachusetts. Program manager responsible for the preparation of stormwater management plans, notices of intent, and no exposure certifications for public works facilities, transfer stations, and landfills in Deerfield, Lenox, and Orange.

Miraval Lenox, Lenox, Massachusetts. Principal-in-charge for an engineering peer review of submitted site plans and stormwater management report for compliance with Massachusetts Stormwater Handbook.

On-Call Wastewater Engineering, Waterbury, Connecticut. Principal-in-charge for Phase I and Phase II SCADA improvements to the city's wastewater collection system pumping stations. This project provided analysis, design, and construction engineering to provide a state-of-the-art licensed radio-based communications system for most of the city's pumping stations.

On-Call Peer Review Services, Avon, Connecticut. Principal-in-charge for peer reviews of the Village Center Development and the School Street Low Pressure Sewer Design.

Multi-Disciplinary On-Call Services, Thomaston, Connecticut. Principal-in-charge for services involving wastewater, water, and roadway infrastructure as well as landfill facilities.

On-Call Services to the WPCA, Derby, Connecticut. Principal-in-charge for plan review, infiltration and inflow, wastewater treatment facility, stormwater pollution prevention plans, and specifications addressing sanitary sewer issues for the City of Derby.

Cambridge Crossing Multi-Use Residential Development, Simsbury, Connecticut. Principal-in-charge for this project involving roadway design and site layout of 88 residential units (single family, duplex, apartments), parking layout, stormwater management and low impact development (LID) systems design, utility (sewer, water, gas, electric) systems design, phases erosion and sedimentation control design, and local and state permitting.

Main Street Revitalization, Clinton, Connecticut. Principal-in-charge for the master plan proposed for the renovation and revitalization of 4,600 linear feet of Main Street and another 3,200 linear feet of side roads, which included placement of overhead utilities underground, new and uniform ADA-accessible walks and crosswalks with pavers, new 'Black Sky' compliant street lighting, a new river walk, a pedestrian way, and a scenic overlook.

BACKGROUND

2015-Present
Project Manager
Weston & Sampson

2008-2015
Senior Civil Engineer
WMC Consulting
Engineers

2003-2008
Water Resources Engineer
Milone & McBroom, Inc.

EDUCATION

2003
Master of Science |
Civil & Environmental Engineering
South Dakota School of Mines &
Technology

1999
Bachelor of Engineering
Civil Engineering
Osmania University

PROFESSIONAL REGISTRATIONS & CERTIFICATIONS

Professional Engineer:
Connecticut No. 25720

Certified Floodplain Manager (CFM)

OSHA 10-Hour Construction
Training

PROFESSIONAL SOCIETIES

Association of State Floodplain
Managers (ASFPM)

Connecticut Association of Flood
Managers (CAFM)

HONORS

CTDOT Approved
Hydraulic Engineer

PRESENTATIONS & PUBLICATIONS

2003
"Characterizing Physical and
Hydraulic Habitat Using ArcGIS and
Hydraulic Modeling Techniques"

2003
"Hydraulic Modeling to
Characterize Brown Trout Habitat in
Rapid Creek"

Raju, a Certified Floodplain Manager and CT Department of Transportation (CTDOT) Approved Hydraulic Engineer, specializes in hydrologic/hydraulic analysis, design, and permitting for stormwater management, MS4, highway, bridge/culvert replacement, flood control, and stream restoration projects. His experience ranges from preliminary project planning through final design to permitting and construction contract administration. An expert in helping clients achieve resiliency from inland/ coastal flooding and shoreline destruction, Raju focuses his efforts on understanding and improving inland/coastal drainage and infrastructure for municipalities.



SPECIFIC PROJECT EXPERIENCE

Municipal Separate Storm Sewer Systems (MS4) Permit Registration, Branford, Connecticut. Project Manager involved with the services required to help the town maintain compliance with the MS4 permit. As of February 2019, prepared the Annual Report, Illicit Discharge Detection and Elimination (IDDE) Report, IDDE compliance with town's inland wetlands agency, dry weather screening, wet weather sampling, and stormwater mapping.

Municipal Separate Storm Sewer Systems (MS4) Permit Registrations and Stormwater Management Plans (SWMP), Prospect, Connecticut. Project manager for this project involving the MS4 permit registration, SWMP, dry weather screening, wet weather sampling, and stormwater mapping as required by the 2016 Connecticut General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4) Reissuance with Modifications.

Municipal Separate Storm Sewer Systems (MS4) Permit Registrations and Stormwater Management Plans (SWMP), Thomaston, Connecticut. Project manager for this project involving the MS4 permit registration, SWMP, dry weather screening, wet weather sampling, and stormwater mapping. as required by the 2016 Connecticut General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4) Reissuance with Modifications.

Stormwater Sampling for Park-Taylor Road Reconstruction, Enfield, Connecticut. Responsible for overseeing monthly sampling and reporting stormwater runoff for turbidity in compliance with the Construction General Permit.

Stormwater Sampling for MDL Realty Remediation Site, Bridgeport, Connecticut. Responsible for overseeing monthly sampling and reporting stormwater runoff for turbidity in compliance with the Construction General Permit.

Philip R. Smith and Eli Terry Elementary Schools Renovation Construction Stormwater Services, South Windsor, Connecticut. Project manager for stormwater inspection and monitoring services related to the construction of additions and renovations at Philip R. Smith and Eli Terry Elementary Schools in South Windsor. These services are being completed for the city to maintain compliance with the CT DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities.

CTDEEP Industrial Permit for the Parks and Recreation Department, Rocky Hill, Connecticut. Prepared the registration, CTDEEP Industrial Permit, and SWPPP for a Parks and Recreation facility.

CTDEEP Industrial Permit for Four Town Facilities, Branford, Connecticut. Revised the SWPPP and performed the stormwater inspection and monitoring at the Public Works facility, landfill, transfer station and wastewater treatment facility.

CTDEEP Industrial Permit for a New DPW Facility, Waterbury, Connecticut. Prepared the SWPPP and registration involved with constructing this new facility.

Dillon Stadium Renovation Construction Stormwater Services, Hartford, Connecticut. Project manager for stormwater inspection and monitoring services related to the construction of additions and renovations at Dillon Stadium Soccer fields renovation in Hartford. These services are being completed for the city to maintain compliance with the CT DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities.

Smalley Elementary School Construction Stormwater Services, New Britain, Connecticut. Project manager for the completion of stormwater inspection and monitoring services related to the construction of additions and renovations at Smalley Elementary School. These services are being completed in order for the city to maintain compliance with the CT DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities.

Francis Walsh Intermediate School Construction Stormwater Services, Branford, Connecticut. Project manager for the completion of stormwater inspection and monitoring services related to the construction of additions and renovations at Francis Walsh Intermediate School. These services are being completed in order for the town to maintain compliance with the CT DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities.

Small Municipal Separate Storm Sewer Systems General Permit, Various Facilities, Connecticut. Senior civil engineer for the registration and CTDEEP Stormwater from Small Municipal Separate Storm Sewer Systems General Permit for facilities in Berlin, Burlington, Harwinton, Litchfield, New Hartford, Norfolk, North Canaan, Plymouth, Rocky Hill, Simsbury, and Winsted.

Permitting, Various Locations, Connecticut. Senior hydraulic engineer for the design and preparation of ACOE and CTDEEP permits including Flood Management Certification, IWRD General Permit, IWRD Individual Permit, and IWRD Diversion Permits for various projects in Cornwall, Granby, Greenwich, New Canaan, New Milford, North Stonington, Plainville, Putnam, Redding, and South Windsor.

Stormwater Discharge from Construction Activities Permit, Connecticut. Project manager involved with the preparation and approval of general permit registration and pollution control plan for Crescent Lake drainage improvements in Enfield, remediation at MDL Realty in Bridgeport, and Solar City Photovoltaic installation in Rocky Hill.

BACKGROUND

2019-Present
Engineer I
Weston & Sampson

2017-2019
Engineering Assistant
Weston & Sampson

2016-Present
Peer Advisor
University of Connecticut
Financial Aid Department

EDUCATION

2019
Bachelor of Science
Civil Engineering
University of Connecticut

CERTIFICATIONS

Engineer in Training (EIT)
Connecticut, No. EIT.0012602

PROFESSIONAL SOCIETIES

American Society of Civil Engineers
Student Member

Ben is an engineer who supports a range of environmental, stormwater, wastewater, and site/civil projects for Weston & Sampson. He is responsible for providing CAD support, cost estimates, water flow calculations, field survey work, and the design of site improvements.



SPECIFIC PROJECT EXPERIENCE

Philip R. Smith and Eli Terry Elementary Schools Renovation Construction Stormwater Services, South Windsor, Connecticut. Provided stormwater engineering services related to the construction of additions and renovations at Philip R. Smith and Eli Terry Elementary Schools in South Windsor. These services are being completed for the city to maintain compliance with the CT DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities.

Francis Walsh Intermediate School Construction Stormwater Services, Branford, Connecticut. Responsible for conducting routine stormwater inspections and monitoring services related to the construction of additions and renovations at Francis Walsh Intermediate School. Other responsibilities include documenting any sedimentation and erosion control issues that are observed as part of a weekly inspection report.

Municipal Separate Storm Sewer Systems (MS4) Permit Registrations and Stormwater Management Plans (SWMP), Wethersfield, Connecticut. Engineer for this project involving the MS4 permit registration, SWMP, dry weather screening, wet weather sampling, and stormwater mapping, as required by the 2016 Connecticut General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4) Reissuance with Modifications.

Municipal Separate Storm Sewer Systems (MS4) Permit Registrations and Stormwater Management Plans (SWMP), Guilford, Connecticut. Engineer for this project involving the MS4 permit registration, SWMP, dry weather screening, wet weather sampling, and stormwater mapping as required by the 2016 Connecticut General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4) Reissuance with Modifications.

Sanitary Sewer Evaluation Survey, Stafford, Connecticut. Prepared a work plan that involved home inspections in search of illicit connections, smoke testing roughly 100,000 linear feet of pipe determine sources of inflow, and manhole inspections to rate and make recommendations on fixes for the towns sanitary sewer collection system. Worked with the client to locate additional manholes previously unmapped, which were causing additional unnecessary flow in the collection system.

West Street Sewer Improvements, Stafford, Connecticut. Oversaw the installation of drainage pipe, catch basins, sewer laterals and temporary backfill.

Stormwater Management for Solar Photovoltaic Project, Urban Green Technologies, Gardner, Massachusetts. Assisted with stormwater management design and preparation of a stormwater management report.

Municipal Separate Storm Sewer Systems (MS4) Permit Registration, Orange, Connecticut. Engineer for this project that involves helping the town maintain compliance with the MS4 permit. With work beginning in 2019, Raju is responsible for overseeing the dry weather outfall screening and testing; wet weather sampling; Illicit Discharge Detection & Elimination (IDDE) Investigations; source identification and removal; drainage mapping, inventory and evaluation; and report review.

Stormwater Management Design, 380 Tunxis Road, West Hartford, Connecticut. Assisted with grading and stormwater management design, erosion and sedimentation control design, and preparation of stormwater management report.

Portland Recreational Complex, Portland, Connecticut. Assisted with stormwater system design modifications, permitting, and construction administration.

Eversource Settling Pond Remediation, Berlin, Connecticut. Assembled drawings and details related to the remediation of a PCB contaminated settling basin. Designed new drainage layout and underground detention system to ensure a lesser discharge post construction. Design work included roadway repair, wetlands replication, stormwater system design, stormwater treatment design, cut/fill calculations, and final grading. Permitting work included the procurement of wetlands approvals, excavation and fill permits, and site permits. Wetland replication involved coordination with soil scientists to provide planting schedules to match the existing wetlands.

Municipal Separate Storm Sewer Systems (MS4) Permit Registration, Thomaston, Connecticut. Collected samples of runoff water at discharge locations and maintained thorough chains of custody to have samples tested and reported to the managing engineer.

Waterbury Industrial Commons, Parking Expansion and Drainage Site Improvements, Waterbury, Connecticut. Assisted the engineer responsible for providing the design of the parking lot and associated site improvements, including a storm drainage system, site lighting, landscaping, erosion and sedimentation control, and sidewalks.

Planning and Zoning Review, Greenwich, Connecticut. Assisted with the review of documents and plans submitted to the Town of Greenwich Planning and Zoning Department. Identified the sanitary sewer lines from proposed dwellings, as well as stormwater pipes, to help ensure codes and safety items were met.

Avon Village Center, Avon, Connecticut. Assisted in the engineering peer review of project design documents, zoning compliance, stormwater management design and local permit applications associated with a large-scale downtown redevelopment project. Work includes preparation of technical report documents for presentation to Town Planning and Engineering Departments. Efforts were repeated after a second submission to the town in the year following.

Manhole Inspection, Pump Station Inspection, Flow Modeling, and Report, Connecticut Water Company (formerly Heritage Village), Southbury, Connecticut. Provided assistance to the lead project inspector for various manhole structure inspections.

BACKGROUND

2019-Present
Technical Leader
Weston & Sampson

2018-2019
Senior Project Manager
Weston & Sampson

2011-2018
Project Manager
Weston & Sampson

2003-2011
Senior Engineer
Weston & Sampson

1998-2003
Environmental Engineer
Weston & Sampson

EDUCATION

2002
Master of Science
Civil Engineering
Tufts University

1998
Bachelor of Science
Civil Engineering, *cum laude*
Tufts University

PROFESSIONAL REGISTRATION

Professional Engineer -
Massachusetts No. 45474

PROFESSIONAL CERTIFICATION

University of New Hampshire
Stormwater Management
Certification Program, 2017-2018

PROFESSIONAL SOCIETIES

New England Water Environment
Association

Water Environment Federation

PAPERS & PRESENTATIONS

June 2017
Jerdee, Theodore and Schwartz,
Jaurice, "A Practical Approach
to Managing Stormwater Assets
and Water Quality in Newton,
Massachusetts," APWA 2017
Summer Conference

Jaurice has more than 20 years of experience in the planning, design, and permitting of wastewater and stormwater systems. Her experience includes working with both municipal and state agency clients and assisting with the procurement of project funding through various state and federal programs. In particular, she has assisted many communities with stormwater permit compliance including the General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s).



SPECIFIC PROJECT EXPERIENCE

MS4 General Permit Notices of Intent and Annual Reports, Various Locations.

Project manager/ engineer for the development of Notices of Intent for the communities of Boxford, Middleborough, Millbury, Tewksbury, Townsend, Watertown, Winchester, and Wrentham, Massachusetts, and Salem, New Hampshire, and the development of annual reports for the communities of Littleton, Lunenburg, North Andover, Pembroke, and Wrentham, Massachusetts, and Salem, New Hampshire in compliance with the MS4 General Permit. Identified BMPs for each town to implement to meet the MS4 requirements, and prepared accompanying Stormwater Management Plans, which outlined existing practices and included a proposed schedule for BMP implementation over the 5-year permit period. Assembled annual reports detailing a community's MS4 progress to date. To address the industrial stormwater permitting component of the NPDES Phase 2 program, coordinated a quarterly outfall sampling program for the town of North Andover's recycling facility.

MS4 General Permit Cost Compliance, Various Locations. Project manager for the review of the MS4 permit for various communities to outline anticipated permit requirements and costs. Completed a breakdown of anticipated permit compliance costs for the communities of Bridgewater, Lunenburg, MassDevelopment (Devens), Millbury, Newton, Rutland, Shrewsbury, Watertown, Winchester and Wrentham, Massachusetts; the Wrentham Developmental Center; and Salem, New Hampshire.

NPDES MS4 Permit Compliance and Consulting Services, Massachusetts Development Finance Agency.

Project manager for consulting services in support of compliance with the NPDES Phase II Permit for discharges from the MS4 at the Devens Regional Enterprise Zone (regulated areas within the towns of Ayer, Harvard, and Shirley). Working with MassDevelopment's Engineering and Public Works Departments to develop an implementation plan. Also assisting with the preparation of a Notice of Intent for submission to EPA and DEP so that Devens can obtain coverage under the new MS4 Permit once it becomes effective.

MS4 General Permit Compliance Assistance, Watertown, Massachusetts.

Provided assistance to the town in complying with the requirements of the MS4 General Permit, including review of permit requirements and costs for compliance as they pertain to Watertown, development of the town's Stormwater Management Plan, and review of the town's existing stormwater regulatory mechanisms, to identify any updates needed to bring the Town into compliance with the permit.

March 2017

Elmer, David and Schwartz, Jaurice,
"MS4 Permit Compliance, CIP
Development & Stormwater Utilities
as a Funding Mechanism,"
The New England States
Government Finance Officers
Association 2017 Spring Conference

January 2015

Elmer, David and Schwartz, Jaurice,
"A Practical Approach to Managing
Stormwater Assets and Water
Quality in Newton, Massachusetts,"
NEWEA 2015 Annual Conference

October 2013

Elmer, David and Schwartz, Jaurice,
"Flood Control through the
Implementation of a Cost-Effective
Stream Maintenance Assessment
Program," WEFTEC 2013 Annual
Conference

October 2012

Elmer, David and Schwartz,
Jaurice, "Flood Control through
the Implementation of a Cost-
Effective Stream Maintenance
Assessment Program in Woburn,
Massachusetts," APWA 2012 Fall
Conference

MS4 General Permit Compliance Assistance, Salem, New Hampshire. Project manager for stormwater-related tasks to assist the town in complying with the EPA's MS4 General Permit. Assisted with the development of a public education program; stormwater bylaw development; enhancement of the town's existing drainage GIS; development of operation and maintenance procedures for municipal activities and facilities; development of a Stormwater Pollution Prevention Plan (SWPPP) for the town's DPW facility; municipal employee training on illicit discharge detection and elimination (IDDE) and the SWPPP developed for the DPW facility; and preparation of a Stormwater Management Plan, IDDE plan, and chloride reduction plan.

Wollaston Beach Drainage Water Quality Study, Quincy, Massachusetts.

Project manager for this study, which included identifying locations within the Wollaston Beach drainage area where contaminated dry and wet weather flows were believed to exist. Based on sampling results, identified high priority areas for illicit connections, and selected storm drains in these areas for more detailed illicit connection identification tasks, including internal television inspection and dyed-water testing of adjacent suspect service connections.

Stormwater Utility Feasibility Study, Shrewsbury, Massachusetts.

Senior engineer for a feasibility study, which examined the town's current and future stormwater expenditures and how current expenditures are funded. Examined potential user fees to be collected under a stormwater utility through the collection of parcel-specific information, including impervious area data. Also examined different alternatives for collecting user fees, including correlating fees to the amount of impervious area on a particular parcel or its zoning/land use classification. Evaluated various rate structure options for user fee collection to balance the level of funding needed with reasonable user rate fees.

Feasibility Study for Drainage Diversion, Salem/Beverly Water Supply Board.

Engineer for a feasibility study to determine whether it was possible to divert a portion of Airport Brook, a tributary of the Wenham Lake drainage area, to the headwaters of the Bass River with gravity flow in order to alleviate flooding problems in the area. Responsibilities included evaluating three alternative routes for the proposed drainage piping to be used in diverting runoff and assisting with writing of the final report.

Impervious Area Assessment, Newton, Massachusetts.

Project manager overseeing the assessment of the impervious area associated with 4,000 non-residential parcels within the City for use by the City in assessing stormwater fees. Impervious areas were generated in GIS by surface type using available color ortho imagery and City parcel data.

BACKGROUND

2018-Present
Project Engineer - Transportation
Weston & Sampson

2017-2018
Engineer II - Transportation
Weston & Sampson

2014-2016
Engineer I - Transportation
Weston & Sampson

May-August 2013
Internship
Site/Civil Construction
Xenelis Construction Co.

Kenneth is a transportation/highway and traffic project engineer with experience in intersection/roadway design and analysis, drainage analysis, and project estimating. He has worked on projects for Connecticut, Massachusetts, New York, and Vermont municipal clients, as well as for the Connecticut DOT. Kenneth has developed plans for horizontal and vertical roadway layout, bridge details, maintenance and protection of traffic, signing and pavement marking, traffic signals, drainage, and grading. He also has prepared construction cost estimates for the design of roadways, drainage systems, and bridges.

**EDUCATION**

2013
Bachelor of Science
Civil Engineering
University of Connecticut

Pending 2020
Masters of Engineering with
Transportation Engineering
Specialization
University of Hartford

SPECIFIC PROJECT EXPERIENCE

Francis Walsh Intermediate School Inspection, Branford, Connecticut. Performed the required stormwater inspections involving turbidity testing for the construction of renovations and additions to the Francis Walsh Intermediate school.

Barnum Avenue, Bruce Avenue, and Oronoque Village Drainage Improvements, Stratford, Connecticut. Engineer for drainage analysis and improvements, including drainage analysis of flood-prone areas, conceptual designs, and site improvements based on implementation of rational method drainage calculations. Work included preparation of permitting and cost estimates, and drafting of construction plans.

Bruce Brook Storm Drain Installation at West Avenue, Stratford, Connecticut. Resident representative for the installation of a 42-inch reinforced concrete pipe and associated manholes, a cast-in-place concrete retaining wall, channel construction, and utility relocation to relieve flooding issues at the Barnum Avenue and West Ave intersection.

Bruce Avenue Railroad Underpass Drainage Improvements, Stratford, Connecticut. Engineer responsible for drainage system alterations and improvements implemented to minimize heavy flooding at the Bruce Avenue underpass. Completed hydrologic analysis using the Storm Sewers - Hydraflow model to assess flooding issues. Presented multiple concept alternatives with a cost-benefit analysis to the town. Coordinated with utility companies to resolve conflicts with drainage structures and cost estimating. Also served as resident representative for the manhole, catch basin, and RCP installation as well as pipe cleaning and joint sealant techniques, and inspected sidewalk installation and roadway milling and paving.

Freeman Brook Drainage Improvements, Stratford, Connecticut. Assisted with construction oversight of the construction of the sidewalk, retaining walls, riprap installation, and site grading installed to reduce flooding and drainage issues along Freeman Brook in the Oronoque Village Condominiums.

Hickory Hill Road Local Transportation Capital Improvement Program (LOTICIP) Application, Thomaston, Connecticut. Engineer responsible for assisting the town in preparing a LOTICIP application for Connecticut DOT. Conducted drainage field survey. Developed concept plan (through aeriels and town ROW mapping) to determine potential roadway improvements. Provided suggestions for drainage

PROFESSIONAL REGISTRATION

Professional Engineer:
Connecticut No. 0032867

OSHA 10-Hour Training

NETTCP HMA Paving Inspector

Certified Nuclear Gauge Operator

PROFESSIONAL SOCIETIES

American Society of Civil Engineers

Connecticut Society of Civil
Engineers

system upgrades and replacements.

Saint James West Roadway Reconstruction, Enfield, Connecticut. Project Engineer responsible for stormwater analysis and design for the roadway reconstruction for multiple residential roads. Used Storm Sewers - Hydraflow modeling software to design the storm drainage systems. Work also included construction cost estimates and review of construction plans.

I-84 Interchange Improvements, Exit 16, State Project 130-182, Southbury, Connecticut. Highway engineer for roadway and drainage reconstruction and improvements, including analysis and design of horizontal and vertical alignments, cross sections, and intersection operations. Used Storm Sewers - Hydraflow modeling software to design the storm drainage systems. Work also includes accommodations for pedestrians, bicyclists, and school buses due to two nearby schools. Traffic analysis and lane configurations required, as well as coordination of traffic signal redesign. Prepared and drafted construction plans and cost estimates.

I-84 Interchange Improvements, Exit 14, State Project 130-173, Southbury, Connecticut. Highway project engineer for roadway and drainage reconstruction and improvements, including analysis and design of horizontal and vertical alignments, cross sections, drainage, and intersection operations. Work also includes accommodations for pedestrians and bicyclists due to vicinity of restaurant and local businesses. Work included traffic analysis and lane configurations, as well as coordination of traffic signal redesign. Design incorporated a modern roundabout at the intersection of the I-84 highway ramp, as well as the complete relocation and realignment of the exit westbound off-ramp. Prepared and drafted construction plans and cost estimates.

Crescent Lake Road Reconstruction, Enfield, Connecticut. Highway engineer responsible for analysis and design of roadway replacement within the Crescent Lake area, including design and improvements of horizontal and vertical alignments, cross sections, and infrastructure upgrades. Used Storm Sewers - Hydraflow modeling software to design the storm drainage systems. Prepared and drafted construction plans and cost estimates.

Sylvan Lake Road Reconstruction, Watertown, Connecticut. Highway engineer responsible for roadway re-alignment to improve horizontal and vertical geometry along Sylvan Lake Road, including improvements to pedestrian and bicyclist conditions to allow for safe access to local park. Work included preparation of construction plans and cross sections, drainage analysis and design, two culvert replacements, intersection grading, infrastructure upgrades, implementation of a large earth retaining wall, and complete cost estimate. Used Storm Sewers - Hydraflow modeling software to design the storm drainage systems. Work also included implementation of geosynthetic-reinforced, soil-integrated bridge system for two culvert replacements and one culvert repair. Responsible for layout of new bridges, design/drafting of plans, and water handling plans.

Parsons Road Reconstruction, Enfield, Connecticut. Highway engineer responsible for roadway reconstruction design and drafting of Parsons Road, which included horizontal and vertical geometry improvements, drainage analysis and design, site grading to ensure minimal residential property impacts, and a construction cost estimate.

BACKGROUND

2020-Present
Engineer III
Weston & Sampson

2018-2020
Engineer I
Weston & Sampson

2016-2018
Engineer II
Barton and Loguidice

EDUCATION

2016
Bachelor of Science
Civil and Environmental Engineering
Norwich University

PROFESSIONAL REGISTRATION

Engineer in Training
Vermont

Patrick is an engineer III in Weston & Sampson's Wastewater group. His experience has encompassed inflow and infiltration studies, wastewater treatment plant upgrades, pump station designs, disinfection plant upgrades, and writing engineering reports.



SPECIFIC PROJECT EXPERIENCE

Municipal Separate Storm Sewer Systems (MS4) Permit Registration, Branford, Connecticut.

Assisted with the services required to help the town maintain compliance with the MS4 permit. As of February 2019, prepared the Annual Report, Illicit Discharge Detection and Elimination (IDDE) Report, IDDE compliance with town's inland wetlands agency, dry weather screening, wet weather sampling, and stormwater mapping.

Municipal Separate Storm Sewer Systems (MS4) Permit Registrations and Stormwater Management Plans (SWMP), Naugatuck, Connecticut. Assisted with this project involving the MS4 permit registration, SWMP, dry weather screening, wet weather sampling, and stormwater mapping as required by the 2016 Connecticut General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4) Reissuance with Modifications. Hampden Street Infrastructure Improvements, Chester, Massachusetts. Performed construction engineering services including construction observation, confirming adherence to contract documents, daily logs, and quantity determination for this project involving the installation of water main along Hampden Street.

Municipal Separate Storm Sewer Systems (MS4) Permit Registrations and Stormwater Management Plans (SWMP), Wethersfield, Connecticut. Assisted with this project involving the MS4 permit registration, SWMP, dry weather screening, wet weather sampling, and stormwater mapping, as required by the 2016 Connecticut General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4) Reissuance with Modifications.

Main Street and Old Westfield Road Sidewalk Improvements, Russell, Massachusetts. Performed construction engineering services including construction observation, confirming adherence to contract documents, daily logs, and quantity determination for this project involving sidewalk improvements.

Infiltration and Inflow Study, Washington County Sewer District #2, New York. Conducted an infiltration and inflow study in multiple areas, which involved reviewing CCTV videos, conducting smoke testing, completing a preliminary design of the stormwater collection system, preparing capital cost estimates, and preparing a report based on the findings.

Niskayuna Wastewater Treatment Plant Upgrades, New York. Assisted in the design of the new vortex grit system, gravity thickener for WAS and primary sludge, and upgrades to the existing dewatering building including a belt filter press and a gravity belt thickener. Worked on creating CAD layouts, sizing pumps and process equipment, and writing basis of design reports for three separate contracts as part of a design-build, energy performance contract for the 3-mgd WWTP.

BACKGROUND

2020-Present
Engineer I
Weston & Sampson

Fall 2019
Engineering Assistant
Weston & Sampson

Spring 2019
Engineering Assistant
Weston & Sampson

Summer 2018
Engineering Assistant
Weston & Sampson

EDUCATION

2020
Bachelor of Science
Civil Engineering
Wentworth Institute of Technology

PROFESSIONAL REGISTRATIONS

Engineer-in-Training

Brad is an engineer for Weston & Sampson's Wastewater group.

SPECIFIC PROJECT EXPERIENCE

MS4 Permitting, Various Locations. Put together permit packages and created figures. Analyzed stormwater monitoring data to ensure the data complied with the allowed limit.

Municipal Separate Storm Sewer Systems (MS4) Permit Registration, Branford, Connecticut.

Assisted with the services required to help the town maintain compliance with the MS4 permit. As of February 2019, prepared the Annual Report, Illicit Discharge Detection and Elimination (IDDE) Report, IDDE compliance with town's inland wetlands agency, dry weather screening, wet weather sampling, and stormwater mapping.

Municipal Separate Storm Sewer Systems (MS4) Permit Registrations and Stormwater Management Plans (SWMP), Naugatuck, Connecticut.

Assisted with this project involving the MS4 permit registration, SWMP, dry weather screening, wet weather sampling, and stormwater mapping as required by the 2016 Connecticut General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4) Reissuance with Modifications. Hampden Street Infrastructure Improvements, Chester, Massachusetts. Performed construction engineering services including construction observation, confirming adherence to contract documents, daily logs, and quantity determination for this project involving the installation of water main along Hampden Street.

Municipal Separate Storm Sewer Systems (MS4) Permit Registrations and Stormwater Management Plans (SWMP), Wethersfield, Connecticut.

Assisted with this project involving the MS4 permit registration, SWMP, dry weather screening, wet weather sampling, and stormwater mapping, as required by the 2016 Connecticut General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4) Reissuance with Modifications.

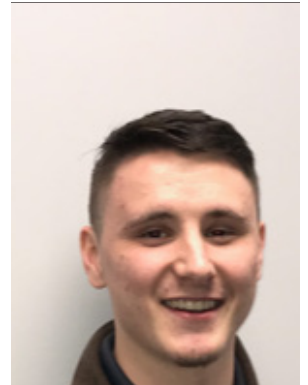
Wastewater Discharge Permitting, New London Navy Base, Connecticut.

Conducted inspection of all wastewater discharge points to ensure they complied with the permit.

Outfall Inspections, Branford, Connecticut. Inspected outfalls, as well as catch basins, to determine the condition of the stormwater drainage system.

Sanitary Sewer Rehabilitation Project, Stafford, Connecticut. Conducted smoke testing and MH inspections to test the sewer lines for any sort of I/I entering the sewer system. Created a Microsoft Access Database, as well as mapping, to make recommendations to the town to minimize the amount of I/I getting into the sewer system.

Sanitary Sewer Rehabilitation Project, Bethel, Connecticut. Worked as an assistant engineer to analyze CCTV videos and helped create a database to make recommendations to the town on reducing I/I.



BACKGROUND

2018-Present
Project Engineer
Weston & Sampson

2017-2018
Technical Product Specialist
BASF, Construction Chemicals

2015-2017
Professional Development Program
Engineer
BASF

EDUCATION

2015
University of Michigan
Master of Science in Engineering
Environmental Engineering

2014
University of Michigan
Bachelor of Science in Engineering
Civil Engineering
Magna Cum Laude

SOFTWARE

AutoCAD, ArcGIS

**PROFESSIONAL
CERTIFICATIONS**

Engineer in Training (EIT)
Michigan

**PROFESSIONAL
ORGANIZATIONS**

New England Water Environment
Association (NEWEA)

Gina is a project engineer in Weston & Sampson's Wastewater Group. She has experience with stormwater outfall inspection, sampling, and reporting, especially as it relates to assisting Massachusetts communities achieve compliance with their NPDES Phase II MS4 Permits. She also has experience in wastewater treatment system planning, design, and construction administration for communities in Massachusetts and Rhode Island.

**SPECIFIC PROJECT EXPERIENCE****MS4 General Permit Compliance, Chelsea, Massachusetts.**

Project engineer for the development of several programs and written documents required for compliance with the NPDES Phase II Permit for discharges within an MS4. Responsibilities for general stormwater compliance included the preparation of significant updates to the City's Stormwater Management Plan, Illicit Discharge Detection and Elimination plan, Standard Operating Procedures for city-wide inspection practices, a proposed schedule for BMP implementation over the five-year permit period, and annual report detailing Chelsea's progress to date.

MS4 General Permit Compliance Assistance, Revere, Massachusetts. Provided assistance to the City in complying with the requirements of the MS4 General Permit, including review of permit requirements, development of the City's Stormwater Management Plan and Illicit Discharge Detection and Elimination supplements, and review of the City's existing stormwater regulatory mechanisms.

Stormwater Regulatory Mechanism Review, Multiple Locations. Provided review of existing ordinances and other regulatory mechanisms for multiple communities in support of compliance with requirements of the NPDES Phase II Permit for discharges within an MS4. Highlighted instances of noncompliance and provided language recommendations for achieving compliance with the MS4 Permit. Provided these services to the communities of Chelsea, Dedham, Hamilton, Hopkinton, Millbury, Revere, Rockport, and Salisbury, Massachusetts.

Stormwater Ordinance Amendments, Salisbury, Massachusetts. Provided review of existing stormwater ordinances for Salisbury in support of compliance with requirements of the NPDES Phase II Permit for discharges within an MS4. Drafted language modifications to achieve compliance with the MS4 Permit and coordinated with the Town and government officials to approve the modifications.

MS4 General Permit Cost Compliance, Framingham, Massachusetts. Provided assistance for the review of the MS4 permit for Framingham to outline anticipated permit requirements and costs, including a five-year projection of capital projects and operation and maintenance costs.

Stormwater Engineering Services, Chelsea, Massachusetts. Project manager for stormwater outfall monitoring and sampling in the City of Chelsea. Coordinate annual wet and dry weather inspections, sampling, and reporting mandated by the EPA under the provisions of the Clean Water Act and new requirements of the MS4 Permit.

Stormwater Engineering Services, Revere, Massachusetts. Assisted the City of Revere with annual wet and dry weather outfall inspection, sampling, and reporting mandated by the EPA under the provisions of the Clean Water Act and new requirements of the MS4 Permit.

Engineering Report and Financial Review, Woonsocket, Rhode Island. Provided a review of and summary report of the current status of Woonsocket's wastewater treatment and collection systems. Review included evaluation of the town's financial records, operation and maintenance data, and capital improvement plans and implementation progress.

Administrative Order on Consent Assistance, Marion, Massachusetts. Provided assistance to the Town of Marion in semi-annual reporting requirements detailing the Town's progress towards compliance with the Town's WWTF AOC. Ongoing responsibilities include assistance with additional reporting requirements for copper and phosphorus removal and regionalization efforts.

Owner's Project Management for WWTF Upgrade and Pump Station Replacement, Uxbridge, Massachusetts. Provided OPM services to the Town of Uxbridge for upgrades to their WWTF and replacement of a proximate pump station, including regular construction site visits, coordination with the contractors for project updates, preparation of daily site visit reports, and attendance at monthly coordination meetings. Responsibilities have also included regular coordination with the project team on construction and project schedules, budget review and oversight, invoice processing for the capital project, change order review and negotiation, and building committee/public presentation of project information.

Comprehensive Wastewater Management Planning, Bridgewater, Massachusetts. Project engineer for the completion of the analysis of alternatives for sewer collection and treatment for the town's 1.44-mgd WWTF. Responsibilities include assessment on environmental impacts and greenhouse gas emissions, coordination with regulatory agencies, including the preparation of an extended Environmental Notification Form for MEPA, and coordination of the public participation process.

Anaerobic Digester Feasibility Study, Nantucket, Massachusetts. Project manager for the study to assess the feasibility of adding an anaerobic digester to the treatment train of the island's Surfside Wastewater Treatment Facility. Responsibilities of the assessment include grant application preparation, the evaluation and quantification of on-island fuel sources, financial viability analysis, public outreach and meeting organization, and coordination with the awarding grant program, the Massachusetts Clean Energy Center Organics to Energy program.

BACKGROUND

2020-Present
Engineer I
Weston & Sampson

2019-2020
Traffic Engineer
InfoTran Engineers, P.C.

2017-2018
Graduate Assistant
University of Hartford

2011-2014
Design Engineer
City of Isfahan
Isfahan, Iran

2000-2011
Civil Engineer
SAZE BESTAR ARIA Construction
Company

EDUCATION

2018
Master of Science
Transportation Engineering
University of Hartford

1996
Bachelor of Science
Civil Engineering
Azad University of Isfahan

PROFESSIONAL REGISTRATION

OSHA 30-Hour Outreach Training
Program - Construction Industry

Daryoush is a civil/transportation engineer with more than 15 years of experience in construction and traffic design. His experience includes developing roadway plans; traffic signal phasing and timing plans; construction plans, monitoring, and supervision; and working closely with all levels of management, engineers, and field operation staff.



SPECIFIC PROJECT EXPERIENCE

Stormwater Construction Inspection, South Windsor, Connecticut. Performed stormwater construction inspection at two schools to ensure all pre-erosion control measures (ECMs), including silt fence, sediment basins, and inlet protection, have been implemented. Responsibilities also included report preparation.

Francis Walsh Intermediate School Construction Stormwater Services, Branford, Connecticut. Responsible for conducting routine stormwater inspections and monitoring services related to the construction of additions and renovations at Francis Walsh Intermediate School. Other responsibilities include documenting any sedimentation and erosion control issues that are observed as part of a weekly inspection report.

Municipal Separate Storm Sewer Systems (MS4) Permit Registrations and Stormwater Management Plans (SWMP), Wethersfield, Connecticut. Engineer for this project involving the MS4 permit registration, SWMP, dry weather screening, wet weather sampling, and stormwater mapping, as required by the 2016 Connecticut General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4) Reissuance with Modifications.

Municipal Separate Storm Sewer Systems (MS4) Permit Registrations and Stormwater Management Plans (SWMP), Guilford, Connecticut. Engineer for this project involving the MS4 permit registration, SWMP, dry weather screening, wet weather sampling, and stormwater mapping as required by the 2016 Connecticut General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4) Reissuance with Modifications.

Municipal Separate Storm Sewer Systems (MS4) Permit Registration, Orange, Connecticut. Engineer for this project that involves helping the town maintain compliance with the MS4 permit. With work beginning in 2019, Raju is responsible for overseeing the dry weather outfall screening and testing; wet weather sampling; Illicit Discharge Detection & Elimination (IDDE) Investigations; source identification and removal; drainage mapping, inventory and evaluation; and report review.

CTDEEP Dam 16205 – Park Pond Dam, Winchester, Connecticut. Responsible for creation and completion of location and aerial mapping of dams/ dikes inspected by the Professional Engineer. Compiled photos and sketches of dams/ dikes inspected. Completed CTDEEP Dam Inspection Forms based on available data, to be further reviewed and finalized by the Professional Engineer.

BACKGROUND

2019-Present
Wastewater Engineer I
Weston & Sampson

2018
Intern
Department of Public Works
Merrimack, NH

2018
Teaching Assistant
University of Maine

EDUCATION

2019
University of Maine
Bachelor of Science in Civil
Engineering

SOFTWARE

AutoCAD, HEC RAS

CERTIFICATIONS

Engineer in Training
New Hampshire
OSHA 10-Hour Construction
Training

Andrew has experience in the planning, design and permitting of wastewater and stormwater systems. He has assisted many communities with stormwater permit compliance including the General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s). Andrew's experience includes conducting field work including mapping, infrastructure inspections and investigations. He has also assisted municipal clients with on-site construction services.



SPECIFIC PROJECT EXPERIENCE

MS4 General Permit Cost Compliance, New

Scotland, New York. Engineer for the review of the MS4 permit to outline the anticipated permit requirements and costs. Completed a breakdown of anticipated permit cost compliance and developed a stormwater budget and long-term capital improvement plan for the town.

MS4 General Permit Compliance Assistance, Winchester, Massachusetts.

Provided assistance to the town in complying with the requirements of the MS4 General Permit, including review of permit requirements and costs for compliance as they pertain to Winchester, development of the town's Stormwater Management Plan, and review of the town's existing stormwater regulator mechanisms, to identify any updates needed to bring the Town into compliance with the permit.

MS4 General Permit Compliance Assistance, Salem, New Hampshire. Provided assistance to the town in complying with the requirements of the MS4 General Permit, including review of the town's existing stormwater regulator mechanisms to identify any updates needed to bring the Town into compliance with the permit.

Stormwater Management Plan, Chelmsford, Massachusetts. Engineer for the development of a plan to assess stormwater quality and flooding concerns and provide recommendations to the town regarding maintenance/improvements of the town's drainage system. Conducted culvert inspections, outfall inspections, and stream assessments to document current conditions of the town's drainage system and provided recommendations to the town.

Sanitary Sewer Rehabilitation, Bedford, Massachusetts. Engineer and inspector for the rehabilitation of 6,750 linear feet of sanitary sewer and 100 sanitary sewer manholes. Recorded quantities and work completed to include in daily reports. Assisted in the review of pay requests, processing change orders, and developing as-built tables.

Dye Testing Potential Inflow Sources, Framingham, Massachusetts. Engineer for a program to dye test roof leaders, yard drains, driveway drains, floor drains, and window drains in private residential and industrial properties to confirm direct connection to either local sanitary or storm sewer systems.