

Professional Overview

Mr. Merrill is a Senior Resident Representative/Engineer in the Construction Services with over nine years of experience in providing design and onsite construction services. His versatility and in-depth knowledge of roadway and utility related design and construction has benefitted BETA on various engineering projects. Mr. Merrill is known for his practical approaches in resolving construction related problems, as well as his communication, coordination and public relations skills. Working with BETA's Transportation/Civil and Environmental Engineering departments he has employed and gained experience over a full range of tasks and responsibilities including:

- Construction Inspection/Observation/Documentation/Permitting
- Transportation, Civil Site and Sewer Design Projects (AutoCAD, Land Development, Civil 3D & Hydro CAD)
- Field Investigation & Survey
- Global Positioning Systems (GPS)
- Geographic Information Systems (GIS)
- Quantitative Analysis (Quest Professional and Quest Web)

Representative projects have included:

Tanyard Brook Culvert Replacement Project – Bristol, RI

- Served as BETA's Senior Resident Representative for this \$3.6 million drainage improvement project, which include significant levels of roadway and site restoration.
- Provided oversight for replacement of approximately 1,550 linear feet of new reinforced concrete box culvert ranging in size from 3'x9' to twin barrel 3'x6'.
- Sewer work consisted of the excavation and replacement of approximately 1,500 linear feet of 15-inch to 30-inch diameter mains and associated services.
- Drainage work consisted of the installation of approximately 1,900 linear feet of 8-inch to 24-inch diameter drain pipelines and related structures.
- Supervised, in coordination with the Town Departments the installation and implementation of storm water and sewer by-pass mains as a means of facilitating the ongoing construction operations.
- Ensured contractors' compliance with contract documents, Town, State and Federal regulations including the Department of Environmental Protection (DEP) and Coastal Resources Management Council (CRMC).

Phase VII SSES Contract S-2010-1 Sewer & Drainage Replacement/Rehabilitation Project – Taunton, MA

- Served as BETA's Senior Resident Representative for this \$2.6 million sewer and drainage improvement project, while overseeing a multi-contract BETA field staff of two inspectors, including MBE/WBE sub-consultants.
- Sewer work consisted of the excavation and replacement of approximately 2,100 linear feet of 8-inch to 15-inch diameter mains and various associated manholes and services.
- Drainage work consisted of the installation of approximately 1,800 linear feet of 8-inch to 42-inch diameter drain pipelines and related structures including a Water Quality Structure.
- Observation of approximately 20,000 linear feet of cured-in-place pipe lining 8-inch to 30-inch diameter sewer and drainage pipe.
- Construction funded under the Massachusetts CWSRF program.



Primary Discipline

Construction Services
Transportation

Experience

- Total: 9 Yrs - w/ BETA: 9 Yrs

Education

- B.S., Civil Engineering Technology, Wentworth Institute of Technology (2003)

Certifications

- OSHA 10-hour Training, License No. 000364950.
- OSHA 40-Hour HAZWOPER Hazardous Waste Operations with Confined Space Entry Training, License No. 67104
- National Highway Institute – FHWA-NHI-131032 Hot-Mix Asphalt Construction

Phase VI SSES Contract S-2009-1 Sewer & Drainage Replacement/Rehabilitation Project – Taunton, MA

- Provided oversight for the installation of 2,400 linear feet of 36” cured-in-place pipe lining for the main interceptor to the waste water treatment facility.
- Construction funded under the Massachusetts CWSRF program.

Winthrop Street, Davenport Terrace and Williams Street Area Sewer Extensions and Mathews Drive Septic System Replacement, Contract S-2009-3 – Taunton, MA

- Provided oversight for construction of 1,300 linear feet of new 6” force main sewer pipe in addition to 300 linear feet of 8” gravity sewer main.
- Assisted in the design of sewer main crossing over the Gordon M. Owen Riverway Bridge as well as miscellaneous details including air release valves.
- Construction funded under the Massachusetts CWSRF program

Prospect Street Reconstruction - Framingham, MA

- Development and design of the full-depth reconstruction of scenic roadway with associated drainage improvements.
- Preparation of plans, contract documents in addition to construction estimate for the Town and Planning Board submittals.

Town-wide Water System - Framingham, MA

- Responsibilities include field investigation of hydrant and water system using Global Positioning Satellites (GPS) to create water networks and databases utilizing ArcView GIS Software.

Route 9 and 27 Interchange - Town of Natick, MA

- Preliminary quantity analysis for the 20 million dollar reconstruction of the interchange for the Massachusetts Department of Transportation.

White Rock Road/Canal Street - Westerly, RI

- Development and design of construction plans for the full-depth reconstruction of roadways. Provided preliminary construction estimate as well as field investigation/survey.

High Street, Hopkinton Road, Westboro Road and School Street Intersection Options - Upton, MA

- Provided numerous intersection options for High Street, Hopkinton Road, Westboro Road and School Street to include; four way stop, signalize intersection and roundabout scenarios.

Sewer and Drainage Manhole Inspections, Narragansett Bay Commission (NBC) - Providence, RI

- Routinely perform combined sewer and drainage manhole inspections utilizing confined space entry training.

Providence Performing Arts Center (PPAC) - Providence, RI

- Provided assistance on plan and document preparation as well as quantity analysis.

1R Improvements, Contract No. 3 - Providence, RI

- Assisted in the preparation and development of contract documents, plans, calculated quantities in addition to performing manual turning movement counter.

- Projects areas include; Angell Street and Waterman Street (between North Main Street and Prospect Street), Broadway and Butler Ave.

Jacob's Drive, Bryant University – Smithfield, RI

- Construction Services to include oversight for the reconstruction of 3,550± linear feet of roadway.
- Provided cost effective decision making in the field consistent with good engineering practices in addition to daily progress reports per client's request.

Residence Hall #18, Bryant University – Smithfield, RI

- Development and design of 232 student residence hall including; sewer, drainage, roadway, associated parking lot and layout of miscellaneous utilities.
- Preparation of plans and contract documents for client, Town of Smithfield and Rhode Island Department of Environmental Management (RIDEM) submittals.

Utility Verification, Bryant University – Smithfield, RI

- Development and preparation of campus wide utility location/verification base mapping combining varies survey methods including; Global Positioning Systems (GPS), traditional survey means as well as record plan research.

Townhouse Apartments "O" & "P", Bryant University – Smithfield, RI

- Development of two housing buildings consisting of 98 students.
- Design include; sewer, drainage, roadway, associated parking lot and layout of miscellaneous utilities.
- Preparation of plans and contract documents for client, Town of Smithfield and Rhode Island Department of Environmental Management (RIDEM) submittals.
- Construction services – submittal of weekly progress reports.

Storage Facility, Bryant University – Smithfield, RI

- Development and design of site layout options, associated utilities, grading and infiltration system for roof leader run-off in addition to related contract documents.

Additional Responsibilities, Bryant University – Smithfield, RI

- Construction services, field survey and quantity analysis for various University projects including; storage facility, compactor pad, University Chapel, President's House and the Bryant University Master Plan.

Prospect Street Culvert – Taunton, MA

- Design and development of Culvert reconstruction.
- Preparation of plans and contract documents for Taunton and Raynham Conservation Commissions and Planning Board submissions.

Winthrop Street, Davenport Terrace, Williams Street Sewer Extension – Taunton, MA

- Assisted with the design and development of construction plans and specifications for new gravity and force main sewer.

Additional Responsibilities – Taunton, MA

- Construction oversight as well as addition survey of varies drainage, sewer and other emergency repair projects.

Erosion Control Inspections - Swansea, MA

- Performed regular site visits to ensure contractor compliance with Swansea Conservation Commission and Department of Environmental Protection (DEP) regulations.
- Subdivisions and Projects include; Laima Estates, Kickamuit Estates, Birch Stevens Farm and Sharp's Lot Road Culvert and waterline installation.

Wickford Main Street Advanced Utilities Contract - North Kingstown, RI

- Engineer, routinely performed field engineering tasks including inspection of drainage and waterline construction and ensured contractors' compliance with contract documents.
- Developed as-built drawings, preformed field survey and quantity analysis utilizing Quest Professional.

Navigant Credit Union – Cumberland, RI

- Routinely worked on plan revisions, parking lot options as well as utility layout.

Navigant Credit Union - East Providence, RI

- Conducted existing utility research and field survey/investigation, developed construction plans, utility design and general site layout.

Navigant Credit Union – Smithfield, RI

- Developed plat and lot plans with associated lot descriptions.

Bristol Marine New Gravity and Force Main Sewer – Bristol, RI

- Design and development of construction plans and specifications for new gravity and force main sewer.
- Utilized directional drilling construction methods on project in relation to wetland areas.

Sewer System Repair and Improvements – Bristol, RI

- Resident Engineer, routinely performed field engineering tasks including inspection of sewer line and paving construction, contractors' compliance with contract documents as well as gather as-built information for the Bristol Water Pollution Control Department.

Silver Creek Drainage Study – Bristol, RI

- Field investigation of 1200-Acre Urban Watershed drainage system throughout the Town of Bristol.

Wastewater Treatment Facility Improvements – Bristol, RI

- Compiled record drawings, design plans and field survey/investigation to develop base mapping, yard piping and mechanical plans of the entire treatment plant for improvements to the facility.

Additional Responsibilities – Bristol, RI

- Construction oversight of roof leader sewer separation at Colt School, drainage improvements to Harker Street and field investigation/survey for Colt State Park Beach and Tanyard Brook Watershed Study.

Old Buttonwoods Sewer Extension – Warwick, RI

- Resident Engineer for the construction of wastewater collection system to service two neighborhoods.
- Project included; 3.5 miles of gravity sewer, one prefabricated above ground pumping station, 3,800 feet of force main and 900 feet of low pressure sanitary sewer.

Pell Library Drainage Improvements - University of Rhode Island (Bay Campus) - South Kingstown, RI

- Routinely worked on plan revisions. Developed drainage system for roof run-off utilizing infiltration systems.
- Emergency Access Road - University of Rhode Island (Bay Campus) - South Kingstown, RI
- Preformed field survey/investigation.
- Developed preliminary roadway layout options.

Rhode Island Department of Transportation

- West Natick Road – Assisted on the emergency repair of roadway due to the Rhode Island flooding in 2010. Development of construction plans, estimate and field observations

- Reconstruction of Route 138 – Development of 30% - 75% plan submissions, Roundabout design, and utility verification through record drawings, field investigation and survey. Quantity analysis for entire project utilizing Quest Professional program. Routinely perform in-house reviews of plans prior to submissions.
- Route 5 (Contract 1) - Development of 30% submission plans, field investigation, traffic counts and quantity analysis for landscaping project utilizing Quest Web.
- Additional Responsibilities – Quantity analysis on various projects including Resurfacing and Reconstruction of Interstate 295 and Atwells Ave both utilizing Quest Professional.

Fish Hatchery Drainage and Pump House Improvements – North Kingstown, RI (RIDEM)

- Development and design of plans and construction documents regarding parking lot drainage and pump house improvements.

On-site Engineering Consultant Services – Johnston, RI (RIRRC)

- Engineering tasks include; layout for various construction projects, inspection of baseliner and capping construction, quantity analysis, generating as-built information using Global Positioning Systems (GPS) and other survey means, as well as ensuring contractor's compliance with contract documents and other landfill related activities.
- Routinely provided cost effective decision making in the field consistent with good engineering practices.

Phase V Methane Gas Collection Header Design – Johnston, RI (RIRRC)

- Developed and designed plans for methane gas collection system in relation to the Phase V fill area.

Town-wide Hydrant GPS - Sharon, MA

- Responsibilities include field investigation of hydrant system to create an information network and databases in ArcView.

On-Call Engineering Services - Burrillville, RI

- Quantity Analysis on streetscape designs
- Field investigation of roadway drainage system

East Boston, Massachusetts

- Licensed Concrete Technician for the construction of the Boston Convention & Exhibition Center
- Responsibilities included regularly testing concrete for the Massachusetts Board of Building Regulations, steel inspection as well as duties associated with quality control.

South Boston, Massachusetts

- Assistant to Survey Supervisor for the Massachusetts Port Authority
- Regularly worked on AutoCAD projects, deeds and other legal documentation as well as assisted on Big Dig project using parcels of land owned by MassPort.