

J CAVANAGH, P.E.

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EDUCATION

B.S. – Civil Engineering, Rensselaer Polytechnic Institute, 2015 Weld Supervisor Training (80 hours), Chicago Bridge & Iron National Electrical Safety Code (NESC) Code Class, transmission voltage focus

PROFESSIONAL REGISTRATIONS AND CERTIFICATIONS

Professional Engineer - Maine

EMPLOYMENT HISTORY

2024 to present – Sevee & Maher Engineers, Inc., Cumberland, Maine, Senior Project Manager

2022 to 2024 – SGC Engineering LLC, Bath, Maine, Project Management Head and Senior Project Manager

2020 to 2021 - Colby Company Engineering LLC, Portland, Maine, Project Manager

2018 to 2020 - SGC Engineering LLC, Augusta, Maine, Project Engineer

2017 to 2018 - Cavanagh Marine, Inc., Tiverton, Rhode Island, Project Manager and Lead Estimator

2015 to 2017 – Chicago Bridge & Iron, Texas and South Carolina, Project Controls Lead, Assistant Project Manager, and Field Engineer

2010 to 2013 - Reed & Reed, Inc., various Maine sites, Field Engineer and Field Engineering Support

AFFILIATIONS

American Society of Civil Engineers (ASCE) member

PROFESSIONAL EXPERIENCE

Mr. Cavanagh is a Maine-licensed Professional Engineer with over 10 years of experience in engineering project management and field engineering for power and energy infrastructure construction projects. He has led multidisciplinary A/E teams in all phases of complex projects, from design through construction. Mr. Cavanagh has supported utilities and private developers in a range of construction projects for power generation, energy storage, distribution, and industrial facility development.

Representative projects demonstrating his project management expertise include the following:

Solar Power

- Reed & Reed, Inc./Three Corners Solar, Collector Substation and Generator Lead Line –
 Detailed engineering for a 100 MW solar project in Benton, Maine.
- Glenvale Solar/Emery Meadow Solar and Turner Meadow Solar Detailed engineering for 34.5 kV CMP Straight Bus Switchyards.
- **Bianchi Electric/Azalea Solar, Collector Substation and Generator Lead Line** Detailed engineering for a 180 MW solar project in Angelina County, Texas.
- E.S. Boulos/Three Corners Solar Overhead Collection Detailed engineering for overhead collection sections to support schedule constraints on a 100 MW solar project in Benton, Maine.
- **Swift Current Energy/Three Rivers Solar** Developed a conceptual site plan for the collector and utility substations to support a planned 100MW PV project.

- Greenskies/Saco Solar Preliminary cable sizing and one-line diagram to support the ISO New England (ISO-NE) application process, and ongoing project support.
- **ISM Solar Various Solar Sites** Performed preliminary cable sizing and developed one-line diagrams for various prospective solar projects in support of the ISO-NE application process.

Wind Power

- Apex Clean Energy/Downeast Wind Collector Substation, Switchyard, and Collection System detailed engineering for a 100 MW wind project in Clinton, Maine.
- EDP Renewables, Substation and Collection System Design Detailed engineering and construction support for the collection systems and substations of three wind farms (Indiana Crossroads Wind Farm: 72 turbines, 302.4 MW; Crossing Trails Wind Farm: 25 turbines, 104 MW; and Rosewater Wind Farm: 25 turbines, 102 MW).
- Maine Aqua Ventus, Facility Siting Support Provided facility planning, constraints analysis and regulatory analysis for siting of mainland electrical infrastructure for offshore wind project.
- Granite Shore Power, Offshore Wind Use Assessment Evaluated existing site conditions of Schiller and Newington Stations to identify potential offshore wind uses and develop conceptual layouts and construction cost estimates.

Power Distribution

Green Mountain Power/Montpelier #3 Substation Rebuild – Detailed engineering for a 34.5 kV switching station in Montpelier, Vermont.

Energy Storage

• E.S. Boulos/Brookfield Battery Energy Storage System (BESS) – Detailed engineering for three Brookfield Renewable Energy battery storage sites.

Industrial Facilities

- Bath Iron Works, Bath, Maine
 - Trades Center Programming and conceptual engineering for the complete building design, including foundations, superstructure, building envelope, and all utilities, components, and finishes necessary for a four-story multi-functional building supporting waterfront operations. The project scope included the demolition of an existing building, site improvements, and utility re-routes/modifications.
 - Trades Storage Building Programming and conceptual engineering for a multifunctional building primarily for storage and shop space.
 - Pier II Auxiliary Building Programming and conceptual engineering for a two-story, 6,000
 s.f., multipurpose building to house material and tool storage, lockers, offices, and restrooms.
 - Kitting Terminal (\$7M construction) Detailed Engineering for a 30,000 s.f. warehouse with high bay rack storage, inbound and outbound delivery and "kitting" areas, and office space. The scope also included the demolition of an existing building, site improvements, and utility re-routes/modifications.
 - Assembly Building Accessory Building Owner's Engineer for a three-story building housing a tool crib, bathrooms, and break room. Supported design reviews for the owner during preconstruction, submittal and RFI reviews during construction, and site observations to ensure conformance with project requirements.

- American Rheinmetall Systems / Windham Facility Fit-out Detailed design for the renovation
 of an existing gym for munitions manufacturing operations. The existing space was programmed
 for a substantial manufacturing area to accommodate the equipment used in the electromechanical manufacturing process. Led the A/E design team through initial site investigations,
 programming, detailed design for all disciplines, permitting, and into construction.
- Milton CAT Rental Facility, Chicopee, Massachusetts Detailed design for the renovation of an existing building for use as an equipment rental facility. The new building included office space, shop space, sales, and service. Led the A/E design team through initial site investigations, programming, detailed design for all disciplines, permitting, and into construction.
- Kelly Construction Services/Newport Naval Station Steam and Condensate (\$5M construction)
 Civil and mechanical design project manager for a design-build project to replace underground steam and condensate system.
- Portland Public Schools/ADA Projects Design project manager for civil design for numerous site accessibility improvements and MEP/structural design for interior ADA improvements at seven schools. Roles as the design PM included initial site investigations and leading the design team through programming, detailed design, RFP preparation, cost estimating, and permitting.
- **Kelly Construction Services/CRREL Acousto Optic Lab Renovation** Design-build project to convert an existing IT space to an Acousto Optic Laboratory for the Cold Regions Research and Engineering Laboratory in Hanover, New Hampshire. Managed project through design including architectural programming, fire protection, fire alarm, mechanical, electrical, structural, and civil.
- U.S. Army Corps of Engineers/CRREL Climatic Cold Chambers Construction Administration (\$5M construction) Led a multidisciplinary A/E team through the construction phase of this design-bid-build project. Managed and coordinated RFI responses, submittal reviews, and construction meetings.