

**Joel R. Kubick, P.E., P.L.S.**

*Civil/Coastal Engineer*

**EXPERTISE**

Modeling of coastal hydrodynamics, and wave processes and in the evaluation of structural and non-structural shoreline protection alternatives. Project management of large-scale construction projects, coastal modeling studies, and the assessment of hydraulic structures. Experience in areas of marine structure design, waterfront construction, and construction project management.

**QUALIFICATION SUMMARY**

- More than twenty-three years of diverse professional experience in the fields of coastal, civil engineering, and land surveying
- Experienced with modeling coastal wave dynamics
- Strong construction methodology knowledge

**WORK EXPERIENCE**

2019-present Civil/Coastal Engineer, Woods Hole Group  
2016-2019 Vice President, Holmes and McGrath, Inc.  
2003-2016 Civil Engineer/Land Surveyor, Holmes and McGrath, Inc.  
1996-2003 Engineer/Surveyor, Nantucket Surveyors, Inc.  
1994-1995 Engineer's Aide, Bechtel Corporation



**Education**

1996 – B.S.  
Civil Engineering Technology  
*Rochester Institute of Technology*  
1993 – A.A.S.  
Civil Engineering Technology  
*Vermont Technical College*

**Licenses and Registrations**

- P.E., Professional Engineer, Massachusetts License 48092
- P.L.S., Professional Land Surveyor, Massachusetts License 46712
- Licensed Massachusetts Construction Supervisor, CS-084327

**Professional Affiliations**

- Member, Massachusetts Association of Land Surveyors and Civil Engineers (MALSCE)
- Member, Association of State Flood Plain Managers (ASFPM)
- Member, American Society of Civil Engineers (ASCE)

## KEY PROJECTS

### **Flood Plain Analysis for Federal Emergency Management Agency (FEMA) Letter of Map Revision (LOMR), Falmouth, MA – Project Manager/Coastal Engineer**

Conducted flood plain analysis to support a FEMA LOMR application to revise the base flood elevations and flood zone map for coastal properties fronting Buzzards Bay in West Falmouth, MA. The 100-year return period wave height and storm surge levels were established and wave transformation and wave runup modeling were completed utilizing the FEMA Coastal Hazard Analysis Modeling Program (CHAMP) and US Army Corps of Engineers methodologies. The potential for erosion was estimated and flood zone delineations were made based on the model results.

### **Design and Permitting of Waterfront Pier Structure at Seacoast Shores Boulevard, East Falmouth - Coastal Engineer**

Responsible for conducting field investigation of existing pier structure at private home. Designed the pier replacement to comply with the existing licensing and previous permit requirements. Assisted in permitting the replacement of the existing structure to provide safe access to the recreational resource.

### **Evaluation of Shoreline Protection at Wigwam Road, West Falmouth - Coastal Engineer**

Responsible for conducting field investigation of existing shoreline protection measures at private home in order to propose alternatives for remediating erosion incurred at the site. Analyzed average annual and extreme storm conditions in conducting desktop study to evaluate alternatives to replace or repair the existing degraded revetment structure. Evaluation of alternatives included an assessment of overall effectiveness, structural lifetime, construction feasibility, as well as estimates of permitting, engineering, and construction costs. Assisted in permitting the replacement of the existing revetment structure to effectively control erosion at the site, to retain the upland facility, and to provide safe access to the recreational resource.

### **Evaluation of Shoreline Protection at Willis Road, East Falmouth - Coastal Engineer**

Responsible for conducting field investigation of existing shoreline protection measures at private home in order to propose alternatives for remediating erosion incurred at the site. Analyzed average annual and extreme storm conditions in conducting desktop study to evaluate alternatives to replace or repair the existing degraded revetment structure. Evaluation of alternatives included an assessment of overall effectiveness, structural lifetime, construction feasibility, as well as estimates of permitting, engineering, and construction costs. Permitted the replacement of the existing revetment structure to effectively control erosion at the site, to retain the upland facility, and to provide safe access to the recreational resource.

### **Construction management at Bird Island Flats tunnel, Boston, MA, Bechtel Corporation / Parsons Brinkerhoff Joint Venture – Engineer's Aide**

Contract administration and field experience working in the Resident Engineer's field office for a \$245,964,000 Contract to build the East Boston portion of the Third Harbor Tunnel (aka Ted Williams Tunnel). Provided engineering and construction support to the entire Resident Engineer's staff. Responsibilities included processing/tracking contractor's submittals, transmittals, and payments, inspecting construction work, verifying State Police & Massport invoices, creating/updating logs to track various information, reviewing and verifying contractor's claims and change orders.