

JAMES W. (BILL) FORMAN, JR., P.E.

PRESIDENT/SENIOR ENGINEER

ARENDELL ENGINEERS

1004 ARENDELL STREET • MOREHEAD CITY, NORTH CAROLINA 28557

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SENIOR CIVIL & COASTAL ENGINEER

AREAS OF EXPERTISE

Urban waterfront redevelopment engineering
Construction management
End to end project management
Construction conflict resolution
Dredging & dredged material disposal
Beach nourishment
Coastal structures
Sediment transport
Coastal construction
Small boat harbor planning & engineering
Small boat harbor vessel traffic assessments
Fixed & floating breakwaters
Bulkheads & waterfront structures

Waterfront development
Environmental & water resource permitting
Environmental assessments & impact statements
Erosion control
Industrial site redevelopment
Horizontal directional drilling, marine outfalls, beach crossings
Site planning & design
Wastewater treatment & reuse
On-site effluent disposal systems
Water distribution systems
Sewage collection, gravity & pressure systems
Storm-water management & reuse

PROFESSIONAL ACCOMPLISHMENTS

- Developed individual specialty for execution of projects in the environmentally sensitive areas.
- Successfully executed urban waterfront redevelopment projects in Baltimore, Chicago, New Bern and Washington, Wilmington, and Beaufort, North Carolina.
- Experience with waterfront projects in Central American (Belize) and Caribbean Islands (St. Lucia and Antigua).
- Completed environmental permitting, design and construction administration for coastal works including bulkheads, revetments, groins, fixed and floating breakwaters, beach nourishment, marinas, waterfront development, and urban waterfront redevelopment.
- Completed design and physical modeling of large coastal works for protection of valuable oceanfront historic sites.
- Design of over two miles of marine bulkhead of steel, concrete, vinyl and composite sheet piles.
- Introduced MBR wastewater treatment and water reuse/reclaim technology into the State of North Carolina.
- Successfully managed and resolved construction disputes, claims and delays.
- Designed and executed dredging and disposal projects, including beach nourishment totaling over eight million cubic yards.
- Permitted, designed and administered construction of small boat harbor and marina projects totaling over 6,000 boat slips in eastern United States.
- Designed and administered construction of steel, concrete and plastic bulkheads for over 2 miles of shoreline.
- Developed expertise in engineering of large and small diameter horizontal directional drilling including ocean beach crossings for marine outfalls and drops from offshore submarine communication cables.
- Engineer for redevelopment of waterfront industrial sites including lumber mills, coal transfer facilities and fish meal factories.

PROFESSIONAL EXPERIENCE

President/Senior Civil Engineer, Arendell Engineers, Morehead City, Morehead City, North Carolina, October 2014 to Present. ■ President and co-founder of Arendell Engineers in October 2014 ■ Project engineer for Front Street Village, Phases 2 and 3 and hotel and bistro development ■ Project engineer for investigations, design, permitting and certification of pressure sewer collection system for Harkers Island, North Carolina.

Senior Civil Engineer, Bay Design Group, P.C. and Bearing Point Consulting, Inc., Morehead City, North Carolina, 2010 to October 2104. Project engineer for Front Street Village, the redevelopment of a waterfront fish meal factory site in Beaufort, N. C. ■ Project engineer for permitting and boat traffic analysis for phase 3 expansion of City of Washington Marina, Washington, N. C. ■ Project engineer for development of Harbor Master plan for Town of Morehead City involving planning and community consensus building.

Senior Engineer/Vice President, Coastal Science & Engineering, Inc. Morehead City, North Carolina, 2000 to 2010. Manager of branch office of coastal engineering firm responsible for marketing, personnel management, engineering and project management. ■ Project engineer for beach nourishment projects at Hunting Island State Park, Edisto Beach, Isle of Palms and Arcadia Shores, S. C., and Ocean Isle Beach and Bogue Banks (3 projects) N. C. totaling over 8 million cubic yards. ■ Project engineer for design of terminal groin at Folly Beach, S. C., rehabilitation of 16 groins at Edisto Beach, S. C. and construction of six steel sheet pile groins at Hunting Island State Park, S. C. ■ Engineer for planning and permitting of redevelopment of waterfront fish meal factory in Beaufort, N. C. ■ Project engineer for permitting design and construction administration for four membrane bio-reactor (MBR) wastewater treatment plants ranging from 10,000 to 180,000 gpd capacities. ■ Project engineer for Neuse River 115 slip floating dock marina project that included 1600 linear feet of floating breakwater for two specific wave directions, fixed access piers, waterfront promenade and marina utilities and fire protection systems in Bridgeton, N. C. ■ Project engineer for waterfront development projects in Belize, Antigua, and St. Lucia. ■ Engineer for storm water ocean outfall utilizing HDD of three 48 inch diameter pipes or direct burial of two 72 inch pipes for City of Myrtle Beach, S. C.

Project Civil Engineer, Stroud Engineering, P.A., Morehead City, North Carolina, 1997 to 2000. Project engineer for private, commercial and municipal site development projects including development of Jarrett Bay Marine Industrial Park in Beaufort, North Carolina. ■ Project engineer for feasibility study and preliminary design of first large scale non-federally funded beach nourishment project using sand from an offshore borrow area in North Carolina. ■ Introduced membrane bioreactor wastewater treatment and treated effluent reuse technology into State of North Carolina at the N.C. Aquarium at Pine Knoll Shores.

Principal/Owner, Forman Engineers, Raleigh, North Carolina, 1993 to 1997. Owned and operated small engineering consulting business. ■ Principal Engineer in support of American Coastal Engineering, West Palm Beach, Florida, including design and prototype testing of low profile pre-cast submerged breakwater units for beach stabilization. ■ Project engineer for design and construction of steel sheet pile fixed breakwater for Blackbeard Sailing Club on Neuse River tributary in New Bern, North Carolina. ■ Project engineer for urban waterfront redevelopment projects in New Bern and Washington North Carolina. ■ Project engineer for development of downtown redevelopment master plan for City of Washington, N.C. ■ Project Engineer for industrial waterfront redevelopment sites in Washington, North Carolina and Mathews, Virginia. ■ Engineer for marina projects in North Carolina and Florida.

Principal Civil Engineer, Moffatt & Nichol Engineers, Raleigh, North Carolina, 1987 to 1993. Civil engineer for large multi-disciplinary marina projects in Maryland, Virginia, Delaware, Rhode Island, North Carolina, South Carolina, Florida, and Illinois. ■ Engineer for large U.S. corporation developing dry storage marinas for boat and motor marketing advantage. Completed feasibility studies, permitting and design for dry storage marinas in Florida, Maryland, Texas, Illinois, and South Carolina. ■ Provided civil engineering for commercial port, shipyard and NAVFAC projects in Florida, Virginia, Maryland, Pennsylvania, New Hampshire, North Carolina and South Carolina. ■ Project engineer for redevelopment of waterfront ship/rail coal transfer site in Baltimore Harbor, MD.

Project Engineer, The John R. McAdams Company, Inc., Chapel Hill, North Carolina, 1984 to 1987. Project engineer for private and municipal site development projects including design and construction document preparation for site grading, drainage, erosion control, sewer collection and water distribution systems, small wastewater treatment systems, and roadway design. ■ Engineer/advisor to county economic development commissions for infrastructure development to serve potential industrial sites.

Coastal Engineer, U. S Army Corps of Engineers, Wilmington District, Wilmington, North Carolina, 1979 to 1984. Project coastal engineer for shore protection projects including shoreline revetment at Fort Fisher National Historic Park including scale model testing and preliminary design. ■ Project engineer for Cape Hatteras Lighthouse seawall protection works including scale model testing and preliminary design of recurved wave deflection wall. ■ Project engineer for study of use of dredging as the sole means of maintaining navigation channel at Oregon Inlet, NC. ■ Completed numerous studies of sedimentation and shoreline change at North Carolina tidal inlets.

Coastal Engineer, U. S. Army Corps of Engineers, Coastal Engineering Research Center, Fort Belvoir, Virginia, 1978 to 1979. Principal Investigator for study on geotechnical aspects of beach nourishment.

EDUCATION

B.S.C.E., 1976, Civil Engineering – North Carolina State University, Raleigh, North Carolina

M.S. 1978, Civil Engineering and Marine Sciences - North Carolina State University, Raleigh

PROFESSIONAL ASSOCIATIONS

American Society of Civil Engineers, Member

National Society for Professional Engineers

Chi Epsilon, National Civil Engineering Honor Society