

### Adam Priest, M.S., E.I.T.

Mr. Priest is a Project Engineer for Maxwell Marine Consulting Engineers, Inc., and has 5 years experience in civil/geotechnical engineering and design, coastal sediment sampling and analyses, hydrographic surveying and construction administration experience. In addition, Mr. Priest has a post graduate degree in Ocean Engineering, which included 2.5 years of extensive field investigations in both construction and post construction monitoring. Mr. Priest's experience highlights include:

#### **Experience:**

# Vero Beach Prefabricated Erosion Prevention Reef™ – Indian River County, Florida

Mr. Priest performed a 2 year investigation of beach changes at Vero Beach, in order to assess the preconditions and performance of the P.E.P Reef submerged breakwaters in reducing coastal erosion along the Vero Beach ocean front. The study analyzed beach profiles from 1972-2006 to show erosion/accretion by determining shoreline position and beach profile changes relative to the Mean High Water (MHW) line. Work included sediment volume calculations, creation of plots of bathymetric grids showing elevation differences over time, and calculation of wave transmission coefficients for the pre- and post-P.E.P. Reef installation conditions. MHW and volumetric shoreline changes along the entire Indian River County coastline from 1997 to 2006 were also determined to show the changes in the vicinity of the P.E.P. Reef area relative to the county wide changes. Mr. Priest recently submitted his findings to the County in 2009.

# Beaches Resort & Spa - Post Hurricane Ike Assessment, Turks and Caicos Islands, B.W.I.

Mr. Priest performed the post-storm assessment of the resort shoreline (1,500 LF), providing coastal engineering field and design services for the project. The Resort lost a significant amount of sand following the Hurricane Ike in September 2008. The field work included the installation of permanent benchmarks behind the dunes, a hydrographic survey of the impacted shoreline with 300 feet wide transects, and comparisons between the post-storm conditions and historical data to facilitate the placement of approximately 15,000 cubic yards of material for the construction of the new beach. Mr. Priest performed all survey data reduction, design of beach templates, quantity calculations, construction drawings, preparation of a Construction Monitoring Plan and all permitting with the Turks and Caicos Government. The new beach is a temporary measure, Maxwell Marine is undertaking a beach management plan for the Resort, with plans to provide an offshore artificial reef breakwater, and is performing post construction monitoring at 6 month intervals.

### Background:

#### Education

BS – Civil Engineering, Virginia Military Institute; MS – Ocean Engineering, Florida Institute of Technology

## Registrations\ Certifications

NAUI - Open Water Diver Surfrider Foundation

#### **Professional Affiliations**

American Society of Civil Engineers (ASCE); Coasts, Oceans, Ports and Rivers Institute (COPRI); Florida Shore and Beach Preservation Association (FSBPA); American Shore and Beach

American Shore and Beach Preservation Association (ASBPA)

## South Caicos Developments, Environmental Impact Assessment, Turks and Caicos Islands, B.W.I.

Mr. Priest assisted in the development, preparation and compilation of information for a Comprehensive Environmental Impact Assessment (EIA), an 800 acre parcel, mixed use development; Terms of Reference (TOR) were issued by the Planning Department of the Turks and Caicos Islands. The EIA included a description of the development objectives, need for the project, compilation of all baseline environmental conditions (comprehensive description of the biological resources and physical forces), impacts of the project on the physical and biological resources, including mitigation measures, areas of impact, and management plans. Maxwell Marine performed a flushing analysis and assessment of coastal processes that would be impacted as a result of the development. The EIA was submitted to the Turks and Caicos Government in November 2008 and is pending their comments prior to submission of building permit drawings.

### South Caicos Developments, Post Hurricane Ike Assessment, TCI, B.W.I.

Mr. Priest performed beach profile surveys in addition to a general site investigation on South Caicos following the passing of Hurricane Ike in September 2008. The work was performed to assist in the determination of the storm related impacts to 3,000 linear feet of beaches, work included data reduction and Pre-storm imagery in AutoCad Civil 3D, estimation of pre-storm profiles, Excel plots of the Post Storm survey data, a report of the general findings, and recommendations for future monitoring to assess the coastal conditions. Maxwell Marine is currently designing dune stabilization for the beaches, per our recommendations.

### Dellis Cay Resort Development, Turks and Caicos Islands, B.W.I.

Mr. Priest is assisting with Design/Build and Construction Administration Services for this 550 acre Island Development, which broke ground in 2008. Mr. Priest has been integrally involved in assisting with construction methodologies for mechanical and hydraulic dredging, spillway design, identifying alternate sand sources, and developing a Draft Channel Management Plan for the adjacent inlet/channel to be managed by the Owner/Developer. Mr. Priest is preparing construction cost estimates related to marine engineering works, and scheduling based on available equipment, local labor, and budget constraints to provide an effective value engineered method of construction. Maxwell Marine will be responsible for construction monitoring services, including turbidity and water quality sampling, reporting, beach surveys, and screening of dredged material for beach placement through 2009. This project is in progress.

### City of Key West - Post Storm Beach Profile Surveying, Key West, FL

As role of subconsultant to the City Engineer (GM Selby Inc.) for the City of Key West, Mr. Priest performed beach profile surveys that documented the post-storm changes of 4.500 linear feet, along six (6) city beaches, in Key West following Hurricane Ike in September 2008. Mr. Priest processed all field data, data reduction, and generated Excel plots of the data with associated plan views of profile locations for submission to GM Selby.

### **Sebastian Inlet Dredging Projects**

Mr. Priest performed turbidity testing and biological monitoring services for the Sebastian Inlet Tax District during the sand trap and channel extension dredging projects in 2007. The scope also included supervision and quality assurance of dredging contractor pipeline location/condition and daily dredging operations.

### St. Lucie County Dune Restoration Project

Mr. Priest was an inspector during the removal of unsuitable material from the dune, screening of the fill from a dune overwash site and placement/spreading of trucked material to restore the affected dune areas. Coordinated between client, contractor, and governmental agencies as well as performed periodic sampling of placed fill for testing purposes.

### Southside Blvd/Tredinick Rd Interchange – Jacksonville, FL

Mr. Priest managed the Regency Bypass Phase II project that included: construction of 1.3 miles of roadway, constructing an overpass bridge, fill retaining system, pavement, associated drainage facilities, roadway lighting, signals and other incidental items acquiring extensive knowledge of the Florida Department of Transportation (FDOT) specifications for Roadway and Bridge Construction. Responsibilities included directing and assigning specific tasks to inspectors and assisting in all phases of the construction project and calculating progress and final estimates throughout the project duration.

### FDOT Roadway Projects – Various Locations

Mr. Priest directed a wide range of geotechnical subsurface investigations and design projects throughout Florida for the FDOT, the Jacksonville Transportation Authority (JTA) and private client's projects included bridges and roadways, public utilities, vibration and settlement monitoring, retail commercial projects and communication towers. Responsibilities included preparation of geotechnical proposals and reports governmental and private clients, conducting laboratory soil classification tests, performing pile driving and drilled shaft inspections, and conducting consolidation, resistivity and soil classification analyses. Mr. Priest scheduled, coordinated and performed subsurface investigations utilizing soil penetration testing (SPT), cone penetration testing (CPT) and pile driving analysis (PDA) of reinforced precast concrete test piles for FDOT bridge projects.