MARINA & WATERFRONT DEVELOPMENT

PLANNING PERMITTING ENGINEERING & DESIGN CONSTRUCTION SERVICES CONSULTING
APPLIED TECHNOLOGY & MANAGEMENT IS KNOWN THROUGHOUT THE INDUSTRY FOR ITS FULL-SERVICE, TURNKEY APPROACH TO WATERFRONT AND MARINA DEVELOPMENT.

ATM approaches development holistically to generate maximum, sustainable benefits from each project. We believe waterfront projects cannot be engineered effectively without integrating economic, market, and environmental issues. This is key to our business model and critical for both public and private clients.

- Is the return worth the investment?
- Is the market sustainable over time?
- What are the boater trends that affect slip absorption and occupancy?
- Does the budget provide for future dock expansion or replacement?
- Are there additional revenue opportunities that should be considered?
- Does the project meet regulatory requirements, or can it be modified to restore or enhance the local ecosystem?

By addressing these and other issues, ATM’s experience-driven planning process results in economically sound and environmentally acceptable development.
SERVICES & capabilities

- **Market Studies & Business Planning**
  - Market Analysis
  - Feasibility Studies
  - Financial Analyses & Pro Formas

- **Facility Planning**
  - Marina Layouts
  - Upland Programming

- **Engineering & Design**
  - Due Diligence
  - Oceanographic Studies & Surveys
  - Coastal Structures
    - Docks, Piers, & Wharves
    - Bulkheads, Revetments, Groins, & Jetties
  - Construction Services

- **Environmental Permitting**
  - Regulatory Approvals
  - Environmental Studies
  - EA/EIS

- **Consulting**
  - Public-Private Partnerships
  - Operational Audits
  - Operations Plans
  - Financial Management & Capital Financing
Market position will dictate rate structures and initial capital investment while boater trends, cruising circuits, and seasonality will drive occupancy and slip absorption.

One of the more valuable tools in marina planning is ATM’s marina-specific pro forma analysis that predicts income and expenses over time (usually 10 years). Multiple “what if” scenarios can be quickly evaluated by combining the estimated construction costs, market data, income opportunities, and the costs of doing business into a single numerical tool.

This proprietary tool can also be used to predict the effects of:

- Phasing Construction
- Using Alternative Construction Materials
- Increasing Staffing
- Slowing the Absorption of the Proposed Slips

In this way, both project feasibility and a recommended course are determined up front.
When laying out a new marina or improving an existing facility, ATM goes beyond basic marina design practices. Working as an integrated team with developers, land planners, architects, and public agencies, we provide unique, physically viable layout solutions that integrate client vision, market factors, and practical engineering principles. The resulting facilities effectively balance aesthetic requirements and operational effectiveness.

Our planning and design experience covers the full spectrum of waterfront facilities ranging from private marinas to resort developments to revitalized urban waterfronts.
Structures must endure constant wet-dry cycles and a corrosive environment. Additionally, marine structures have an impact upon local hydrodynamics, sediment transport, and marine habitat.

ATM’s coastal and structural engineers are experienced in addressing the challenges of marine structure development and placement. Our extensive working knowledge of coastal environments and practical experience gives us a unique understanding of the site-specific needs of coastal structures and their effect on natural systems.

Leading lending institutions call on ATM’s expertise to conduct comprehensive due-diligence inspections for risk assessment on marine structures and to evaluate marina facilities being considered for their portfolios.
ENvironmental Permitting & Consensus building

The popularity of waterfront living and recreation has put increasing pressure on coastal resources all over the world. Access to the water is at a premium, and new development must be balanced against the unplanned destruction of natural areas.

ATM approaches every marina and brownfield waterfront project with the philosophy that responsible waterfront development sustains and enhances our shared natural coastal resources. Our clients learn that projects don’t have to be an either/or proposition.

With mutual objectives, innovation, and solid science and engineering, we negotiate regulatory issues with the authorities and provide solutions that both meet client goals and allow them to take pride in the environmental aspects of their projects.
ATM's team of marina and development experts have planned, designed and/or engineered more than 600 marina projects supporting both public and private interests throughout the world, providing feasibility, design, permitting, environmental consulting, and/or construction consultation services.

We have been providing environmental and engineering services to the international community for more than 25 years. ATM's specialized expertise in international development includes coastal engineering, environmental engineering and science, marina and waterfront development, design evaluation, surveying and mapping, and ecological protection and mitigation, as well as assistance with marketing and financing. ATM professionals have long been associated with the Urban Land Institute (ULI) and routinely work with project lenders and financiers.

We have directed marina construction projects worth hundreds of millions of dollars over the last few years, including Yacht Haven Grande, the most advanced joint marina and upland facility in the Americas. We direct projects in the Caribbean, Europe, Asia, and beyond, including long-term comprehensive plans and multiple marinas in Dubai.
The Bahamas

Abaco
Abaco Inn
Gorda Cay Disney
Great Guana Cay
Angelfish Point
Sandy Point Marina

Andros Island
AUTEC Shallow Water Range Cable Installation,
Little Stirrup Cay, Berry Islands/Andros Island
Fresh Creek Marina, Andros Town
Morgan’s Bluff

Berry Islands
Chub Cay Resort Development, Chub Cay
Norwegian Cruise Lines, Big Stirrup Cay
Chub Cay Shoreline Analysis
Hoffmans Cay
Whale Cay

Bimini Islands
Bimini Bay Resort and Marina
Bimini Inlet, North Bimini Island
Brown’s Marina, North Bimini

Grand Bahama Island
Old Bahama Bay
Discovery Bay
Freeport Harbor
Isle of Allura
The Cove at Port Lucaya
Grand Bahama Resort

Silver Point, Lucaya
Ritz-Carlton
Gold Rock Creek
Ginn Sur Mer Resort, West End

Eleuthera Islands
Hatchet Bay Marina
Unicorn Cay
Windermere Club
Winding and Half Sound Bay
Davis Harbor
Seashells at Cotton Bay
Royal Island Development
The Cove Marina, North Eleuthera
Sky Beach Club

Exuma Islands
Crab Cay Development
Emerald Bay Marina, Great Exuma
Normans Cay Marina Resort, Exuma Cays
Bonefish Marina, February Point
Royal Cay, Little Exuma

Long Island
Port Yuma Cruise Destination, Clarence Harbor
Long Island Resorts, Stella Maris
Diamond Crystal Properties

Mayaguana Island
Mayaguana Development

New Providence
Atlantis Resort, Paradise Island
Athol Island Golf Course, Paradise Island
Ocean Club and Golf Course Renovation, Paradise Island
Rose Island Resort, Rose Island
Shell Bahamas Offshore Mooring Facility at Clifton Pier
Aqua Dyer Open Ocean Aquaculture Facility, Salt Cay
Ocean Bay, Nassau
Ocean Club Marina, Paradise Island
South Ocean Property

Rum Cay Island
Rum Cay Marina, Rum Cay

San Salvador Island
Preliminary Marine Facilities Siting Assessment
 Turks & Caicos Islands

West Caicos Marina, Providenciales
Taylor Bay, Providenciales
Aquatic Centre Ltd., Providenciales
Cooper Jack Marina, Providenciales
Cotton Bay Ltd., Providenciales
Grace Bay Beach, Providenciales
Leeward Canals, Providenciales
Leeward Resort, Providenciales
The Meridian Club, Pine Cay
Amanyara, Northwest Point, Providenciales
Provident Ltd., Providenciales
Provo Power Company, Providenciales
Saadet Ltd., Providenciales
St. James Marina, Providenciales
Turtle Cove Marina, Providenciales
Water Cay Club Resort, Water Cay
Cruise Ship Facility, Grand Turk
Mare Bello Resort Development, North Caicos
Caicos Marina and Boatyard, Providenciales
Long Bay Hills, Providenciales
Tuscany at Grace Bay, Providenciales
Sand Dollar, Grand Turk
Public Inner Harbours, Grand Turk
Mare Bello Development LLC, Middle Caicos
Parrot Cay Private Development, Parrot Cay
South Caicos (CMK), S. Caicos
Caribbean Islands

Yacht Haven Grande, St. Thomas, USVI
Nanny Cay Marina, BVI
El Conquistador, Puerto Rico
Ponce Hilton Resort, Puerto Rico
Palmas del Mar, Puerto Rico
Westin Roco Ki Resort, Dominican Republic
Ocean World, Puerto Plata, Dominican Republic
Dolphin Quest, Southampton Princess Hotel, Bermuda
Cayman Palace, Grand Cayman
Cap Juluca, Anguilla
Four Seasons Resort, Nevis
Gift Plantation, St. Lucia
 Marriott Castle Harbour Resort, Bermuda
Ritz-Carlton, Grand Cayman
Graeme Hall Swamp, Barbados
Grande Anse Estate, St. Lucia
Ariel Sands Resorts, Bermuda
Scrub Island, BVI
Sonesta Resort, Anguilla
Thatch Cay, USVI
Fairmont Hotels, Bermuda
Altamer Resort, Anguilla
Beef Island, Tortola, BVI
Virgin Gorda Yacht Harbor, BVI
Antigua Yacht Club, Antigua
Simpson Bay Yacht Club, St. Maarten
Rodney Bay Marina, St. Lucia
Christophe Harbor, St. Kitts
Port George, Grenada
North Sound Yacht Club, Virgin Gorda, BVI
Port-au-Prince, Haiti
Carr's Bay and Little Bay, Montserrat
Mexico & Central America
Puerto Los Cabos, San José del Cabo, Mexico
Puerto Cancún, Cancún, Mexico
Puerto Careyes, Mexico
Isla Blanca, Cancún, Mexico
Huatulco Resort, Mexico
Chalacatepec, Jalisco, Mexico
Holbox, Quintana Roo, Mexico
Marina Costa Baja, LaPaz, Mexico
Los Micos Resort, Bahía de Tela, Honduras
Port Royal Resort, Roatan, Honduras
Eco Desarrollo Papagayo, Costa Rica
Carara Resort Marina, Costa Rica
Bahia Escondida, Costa Rica
Hacienda San Alfredo, El Salvador
San Juan del Sur Marina, Nicaragua
Escameca Grande, Nicaragua
Fort Sherman Marina, Panama
Fort Amador, Panama
Playa Corona, Panama
Boca del Drago Bocas del Toro, Panama
Brisas Amador, Amador Causeway, Panama
Las Perlas, Panama

South America
Cartagena Convention Center Marina, Colombia
EcoLand Resort, Pi, Brazil
Isla San Francisco, Asunción, Paraguay
Caracas Bay Master Planning, Curaçao
Marina Due Diligence, La Guaira, Venezuela

Canada
Port of Quebec, Quebec City, Quebec
Big Bay Point Resort, Barrie, Ontario

Europe
Koncha Zaspa Resort, Kiev, Ukraine
Marina de Cope, Murcia, Spain
Bodrum, Turkey
Sibenek, Croatia
Gocék, Turkey
Monte Carlo, Monaco

Asia
Nine Dragons Resort Marina, Shanghai, China
Quingdao Marina, Quingdao, China
Silk Island and Silk Bay Projects, Guangdong, China
Fashion Island, Hainan, China
Jisepo Port Waterfront Marina, South Korea
Cabó de Rama Resort, Goa, India
Hulhule Resort Marina, Malé, Maldives

Middle East
Anchor Marina, Palm Jumeirah, Dubai
Palm Jumeirah Mega Yacht Marina, Dubai
Crescent A & E Marinas, Palm Jebel Ali, Dubai
Al Seef & Baniyas Marinas, Dubai Creek
Jewel of the Creek, Dubai Creek
Dubai Festival City, Dubai Creek

Dubai Promenade
Dubai Waterfront Phase 3
Dubai Marina Phase 3
Saraya Islands Resort, Ras Al Khaimah
Coral Island Resort, The World Islands, Dubai
Pavilion Marina, Dubai Maritime City
Harbour Marina, Dubai Maritime City
Mamzar Island Marina, Palm Deira, Dubai
Marina A, Palm Deira, Dubai
IGY Palm Diera DIC Marina, Dubai
Al Harf Resort, Mussandam, Oman
Al Aqr Resort, Oman
Marina Bander Al Rowdha, Muscat, Oman
Abu Dhabi Marine Sports Club, Abu Dhabi
Najmat Marina at Reem Island, Abu Dhabi
Jumeirah Beach Hotel Marina, Dubai
Channel Basin Marina, Palm Deira, Dubai
First Complex Marina, Palm Deira, Dubai
Central Park Marina, Palm Deira, Dubai
Michael Schumacher Tower, Abu Dhabi
Sowwah Water Taxi Stops, Abu Dhabi
Ayla Resort Marina, Aqaba, Jordan
Al Khayaal Resort Marina, Oman

Africa
Port of Conakry, Guinea
Ariana Waterfront Development, Tunis, Tunisia
Port of Cabinda, Angola
Port Ghalib, Marsa Alam, Egypt
Mssr El Alamein, Egypt
Kiswere Harbour, Tanzania
Taghazout, Morocco
ATM's Middle East operation was opened in October 2005 when Island Global Yachting (IGY) was offered the exclusive contract for the development and operations of Nakheel's marina properties in Dubai. As IGY’s engineering and consultancy arm, ATM initiated the planning, feasibility, and engineering studies for the proposed development of approximately 40,000 berths on the three Palm Islands, Dubai Waterfront, the Arabian Canal, Dubai Creek, and along the Dubai coastline. The engineering design packages were also completed for Anchor Marina and Palm Jumeirah Megayacht Marina as well as several facilities on Palm Deira. ATM has also completed marina planning and feasibility work, coastal studies, and infrastructure design projects for several World Islands projects, and the planning and design of Festival Marina in Dubai Festival City.

ATM has provided marina consulting services to a number of developers in Dubai, Abu Dhabi, and the other Emirates as well as for Middle East clients in Oman, Qatar, Bahrain, Egypt, and Jordan. These clients include: EMAAR, Limitless, Nakheel, Saraya, and many others. ATM's Dubai office remained active through the world-wide financial crisis and provides our clients in the Middle East and Asia with specialized marina, coastal, environmental, and water resources engineering services to developers, A/E partners, and government clients.
CHRISTOPHE HARBOUR MARINA
St. Kitts, West Indies

The Christophe Harbour Resort Project involves the creation of a harbor, lagoon, and islands within the Little Salt Pond and Great Salt Pond on the Southeastern Peninsula of St. Kitts. ATM is providing multiple services in support of the project including coastal and marine engineering, water quality modeling, and marina planning, design, and construction observation. When completed, the Christophe Harbour Resort will feature a state-of-the-art megayacht marina capable of accommodating vessels up to 300 ft LOA, a Mediterranean-inspired marina village, luxury hotels, various upscale residential products, as well as a Fazio signature golf course.

NORTH SOUND YACHT CLUB
Virgin Gorda, BVI

ATM was retained to support a new marina facility in North Sound, Virgin Gorda, BVI. The project site is located within a deepwater bay within the heart of the British Virgin Islands cruising grounds. The facility was designed to provide megayacht berthing associated with the prestigious Oil Nut Bay development, and complement the 11 villas and marina village on the hillside adjacent to the marina. ATM performed facility planning and developed layout alternatives and phasing options, preliminary engineering design, and upland program recommendations. The Client proceeded with a floating dock option, relying on ATM for development of floating dock performance specifications and design and construction phase consulting.
ATM was selected to provide full-service marina and coastal engineering consulting for a private development near San José del Cabo. The development property fronts the Sea of Cortez and will offer a state of the art marina (up to 500 slips at full buildout) in conjunction with golf courses, hotels, commercial and retail offerings, a Mexican village, an eco-park, and a variety of residential sites. The marina is operational and dock construction is underway for additional phases.

ATM’s creative marina design enabled a number of different areas targeted for different users. The basin shape was driven by natural features and careful and aesthetically valuable integration with the future land program elements around it. The basin increases the value of the upland development by creating more waterfront property, thereby resulting in a better financial return overall at buildout. The resort’s official website states “the new marina at Puerto Los Cabos is probably Baja California’s biggest construction project in a generation.”
YACHT HAVEN GRANDE
St. Thomas, USVI

Setting a new standard in luxury marinas, Yacht Haven Grande in St. Thomas, USVI, is the ultimate yachting destination. As the primary marina consultant to Island Global Yachting (IGY) for the marina restoration project, ATM evaluated the market for the proposed facility, developed a design layout based on market demand, assessed the financial viability for the proposed restorations, designed the project, and observed construction.

Results of ATM's analyses included identification of the pertinent market factors and forces projected to drive the demand, absorption, and physical features of the facility. Seasonal projections, slip rate sensitivity and absorption projections also were incorporated to result in a market-driven marina layout.

Phase One
- 48-slip dedicated megayacht facility
- 5,193 linear feet of dock space
- 80,000 square feet of retail space
- 31,000 square feet of office space
- 4 waterfront restaurants
- Exclusive private yacht club
- 12 luxury condominiums
- In-slip high-speed communications
- Up to 600 amps of 3-phase power
- High-speed in-slip fueling and fuel dock
- 24-hour security

Phase Two
- 70-room hotel
- 40,000 square feet of additional retail space
- Additional restaurants
- 25,000 square-foot conference center
- 130 additional slips in marina
- Water-based theme park
- Outdoor recreational facilities
United States

**Alabama**
SaltAire Marina, Mon Louis

**Delaware**
Indian River Inlet Marina, Rehoboth Beach

**Florida**
- Miami Beach Marina, Miami
- Virginia Key, Miami
- Ft. Pierce City Marina, Ft. Pierce
- Halifax Harbor Marina, Daytona
- Stock Island Marina, Key West
- Laishley Park Marina, Punta Gorda
- Old Port Cove Marina, North Palm Beach
- TerraPointe East Nassau Dev., Nassau County
- Clearwater Municipal Marina, Clearwater
- Sebastian Inland Harbor, St. Augustine
- San Marco Marina, Jacksonville
- Dolphin Reef Marina, Jacksonville
- Municipal Marina, Madeira Beach
- Amelia Island Yacht Club, Amelia Island
- Marineland Marina, Marineland
- Fernandina Harbor, Fernandina Beach
- Timber Island, Carrabelle
- E.D. Holdings Marinas, Statewide
- Naples City Marina, Naples
- Palatka Waterfront Redevelopment, Palatka
- Legendary Marine, Destin
- Bay Point Marina, Panama City
- Okee Tantie Marina & Campground, Okeechobee
- Northeast Marina, East Palatka
- Madeira Towers Marina, Daytona Beach Shores

**Georgia**
- Golden Isles Marina, Brunswick
- Thunderbolt, Savannah
- Oxbow Meadows, Columbus
- Liberty Harbor, Brunswick
- Kilkenny Creek Marina, Richmond Hill
- Aqualand Marina, Flowery Branch
- Fort Gordon Marina, Columbia County

**Kentucky**
Marina at English Park, Owensboro

**Louisiana**
- Amite River Mariners Club, Port Vincent
- Tickfaw River Mariners Club, Killian

**Maryland**
- Canton Crossing Marina, Baltimore
- Bay Bridge Marina, Stevensville

**Massachusetts**
- Marina Bay, Boston
- Provincetown Marina, Provincetown

**Michigan**
- Bay Harbor Marina, Bay City

**Mississippi**
- Pascagoula Harbor Marina, Pascagoula

**North Carolina**
- Cypress Landing, Chocowinity
- Gum Thicket Marina, Oriental
- Albemarle Plantation, Edenton
- Southport Marina, Southport
- Arlington, Arapahoe
- Marina at the Pamlico, Washington
- Washington Drystack, Washington
- Daniels Point Marina, Arapahoe
New Jersey
Liberty Landing, Newark
Seaboard Landing, Penns Grove

New York
Pier 57, Manhattan
Montauk Yacht Club & Resort, Long Island
Gratwick Park Marina, North Tonawanda
Frink Marina Site, Clayton

Oklahoma
Pier 51, Mannford

Rhode Island
41° North, Newport
Quonset Redevelopment, Newport
Weaver Cove Marina, Melville
New England Boatworks, Melville

South Carolina
Harbour Town Yacht Basin, Hilton Head
Windmill Harbor, Hilton Head
Big House Landing, Palmetto Bluff
Beaufort City Marina, Beaufort
Lady’s Island, Beaufort County
Charleston City Marina, Charleston
Bristol Marina, Charleston
Cooper River Marina, Charleston
Seabreeze Marina, Charleston
Litchfield Marina, Litchfield
Georgetown Harborwalk Marina, Georgetown
The Reserve at Lake Keowee, Lake Keowee

Crickett Cove, Little River
Grande Dunes, Myrtle Beach
Megayacht Marina, Port Royal
St. Johns Yacht Harbor, Charleston
Mariners Cove, Little River
Osprey Marina, Myrtle Beach
Daniel Island Marina, Charleston
Fretmac/Keowee Drystack, Sunset
Kiawah River Plantation, Johns Island
Lakewilde Plantation, Elloree
Charleston Harbor Pilots Assoc., Charleston
Charleston Harbor Marina, Charleston

Tennessee
Tennessee National, Loudon
Lockett Marina, Gallatin

Texas
Ingleside Marina, Ingleside
Caracol Marina, Port O’Connor
Lake Country Marina, Ft. Worth
Emerald Point, Austin
Tawakoni Marina, Lake Tawakoni
Canyon Lake Marina, Canyon Lake
Hurst Harbor Marina, Lake Travis
Newport Marina, Mustang Island

Virginia
Washington Sailing Marina, Alexandria
Harbor Station Marina, Dumfries
Bluff Point, Northumberland County
Kerr-Bugs Island Lake Marina, Clarksville
ATM is a marine, coastal, environmental, civil, and water resources engineering firm that specializes in marina and waterfront development, coastal engineering, beach restoration, environmental permitting, hydrological modeling, wetland permitting and management, and site/civil development. Founded in 1984, we serve public and private clients throughout the world.

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