

DRY STORAGE FACILITIES



- Planning & Layout
- Construction Guidance
- Operations & Management

DREAM HARBOURS CONSULTING



Turrell, Hall & Associates, Inc.
marine & environmental consulting

Introduction

Turrell, Hall & Associates, Inc. and Dream Harbours Consulting have worked on Dry Storage projects in America and around the world. We have extensive experience with a full range of Dry Storage planning, design and construction services along with related shoreline support facilities, launch alternatives, staging docks and often adjoining marinas and boatyards.

We continually track the evolving characteristics and dimensions of vessels that will need to fit into modern Dry Storage buildings.

Our Services Include:

- Assistance with site selection and evaluation for Dry Storage building potential along with docking concepts and environmental permitting.
- Dry Storage building design including inside capacity and layout alternatives based on local codes and conditions. Evaluation of metal and tilt-wall concrete construction alternatives.
- Building details including fire control systems, bunk designs, corrosion protection, adjustable rack systems, fork lift selection to match the project's needs, and other important details.
- Exterior needs such as launch facilities, staging docks, wash racks and washdown systems in consideration of evolving regulatory requirements.
- Marine engineering, Dry Storage building and rack designs, bidding services and specialized construction management.
- Marina and boatyard design including facility and yard layouts, travel lifts and maintenance area needs.
- Operational assistance including selection of management software, emergency response plans, coordination of staff training and facility operation manuals.



Featured Projects

Built and In Operation

Page #

Carrabelle Boat Club, Carrabelle, Florida	10-11
Diversified Yacht Service, Ft. Myers, Florida	12-13
Gulf Star Marina, Ft. Myers, Florida	14-15
Hamilton Harbour, Naples, Florida	16-17
Naples Boat Club, Naples, Florida	18-19
Nautico Marine, St. Petersburg, Florida	20-21
Rose Marco River Marina, Marco Island, Florida	22-23

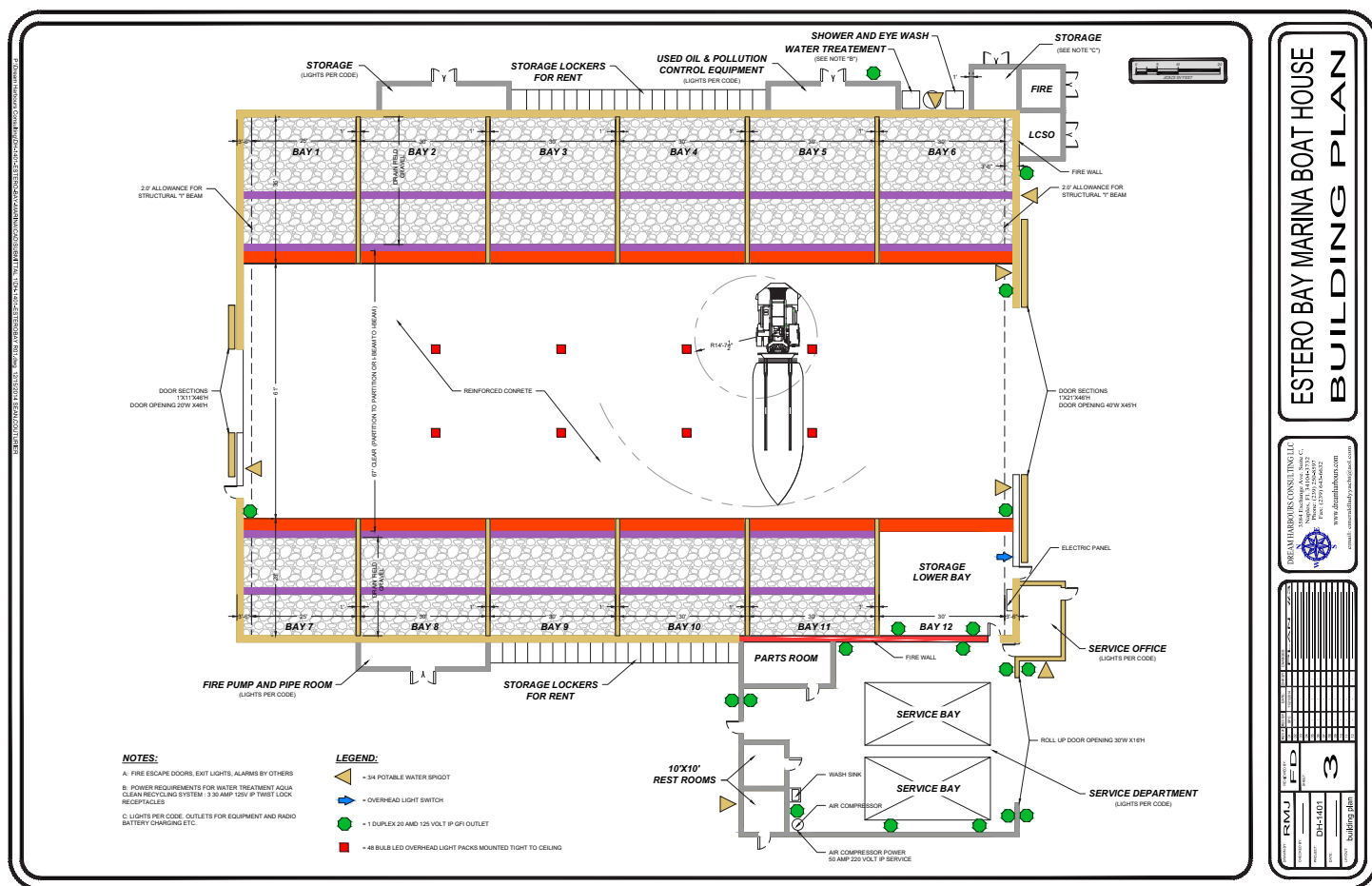
In Design Phase

Page #

Deep Lagoon Marina, Ft. Myers, Florida*	24-25
Ocean Reef Club, Key Largo, Florida*	26-27
Bradenton Boat Club, Bradenton, Florida	Rattlesnake Point
Casey Key Marina	Regatta Landing
Dana Point, California	Salt Creek
Docks on Fifth, Naples, Florida	San Diego, Point Loma, California
Estero Bay Marina	Sarasota Whitaker Yacht Club
GB 32, San Diego, California	Sevastopol Yacht Club, Russia
Holton Property	Tarpon Cove
Moody Bellinger, Jacksonville, Florida	Trafalgar Wharf, Portsmouth, U.K.
Maximo Moorings Marina,	Treviso Bay Marina
Marina Del Palma	
New Smyrna Beach	

**featured*





Sample layout of a Dry Storage building plan.



Fork lift boat launch at Carrabelle Boat Club.



We have extensive experience providing Dry Storage building design concepts including efficient inside capacity and optimal layouts based on local codes and conditions. Our team tracks the ever changing characteristics of boats that use dry storage so your building's rack layout is accommodating. Once a fleet matrix and building style is selected, our team can provide a bid package for the steel racks and other components to save money on overall construction costs. The selection of required equipment is essential and should match the facility. We can then assist the owner with the selection of architectural enhancements and the general contractor with specialized site engineering. We also offer experienced construction management for the Dry Storage building and associated marine facilities.



Nautico Marine (metal building).

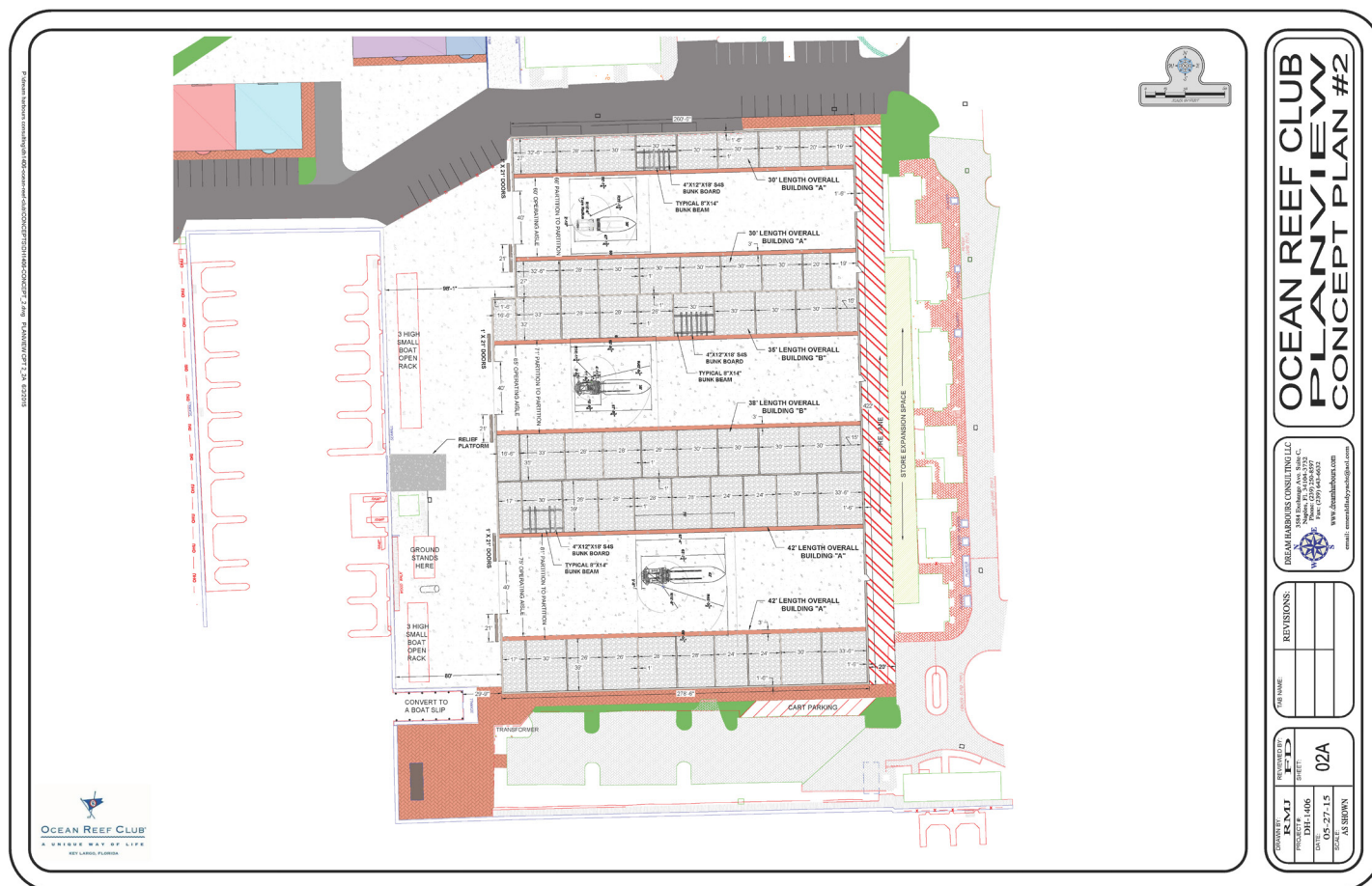


Hamilton Harbor (concrete tilt wall building).

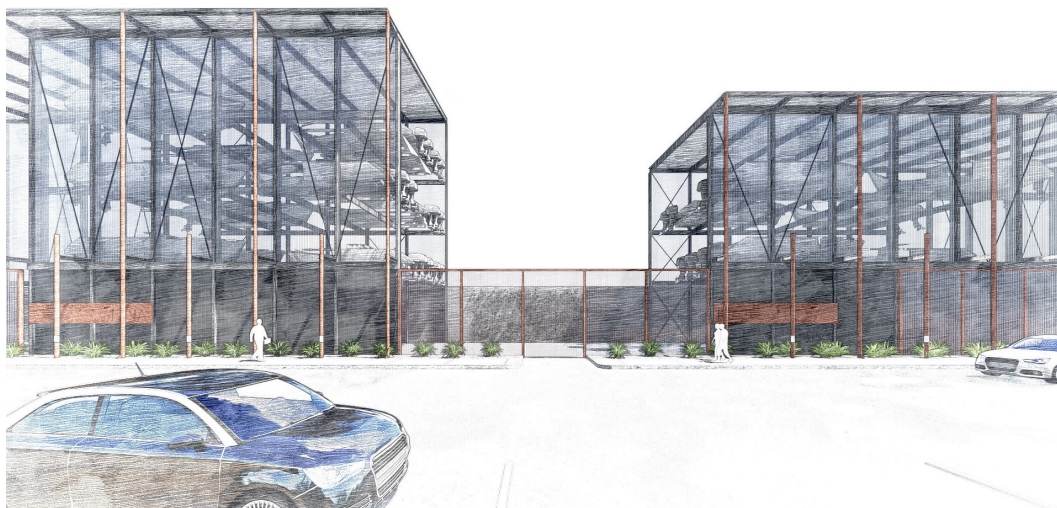


Carrabelle Boat Club (metal building with 3 bays, harbor master office to left).



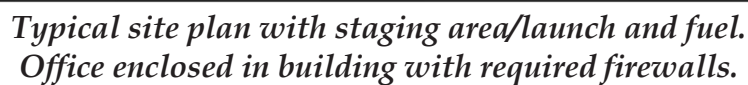


Every Dry Storage building floor plan is unique to the specific footprint and needs of the property. Plan view shown is for 500+ boats, 30' to 42' LOA (length overall).



Artistic renderings can aid in the planning process. Project featured here is in San Diego, CA.





Our team of Ocean and Mechanical Engineers provide expertise in the production of construction plans for the facilities we design. These are done in consideration of local laws and regulatory restrictions including building heights, set-backs and what can seem to be overwhelming waterfront environmental rules and regulations. We can provide bidding services to solicit prices from qualified contractors and then construction oversight services to ensure a quality project is delivered to the owner.



Construction oversight in Naples, Florida.



Hamilton Harbour tilt wall concrete construction.



We have extensive experience with water recycling and filtration often built in conjunction with Dry Storage including marinas and boatyards, travel lifts, maintenance areas and state-of-the-art washdown facilities.



Rose Marina, Marco Island, Florida.

We can lend operational assistance including the selection of marina management software to run the facility (there are lessons to be learned in choosing the right system).

We produce marina operational plans along with emergency response contingencies. These documents are produced in a practical manner to make them easy to use, while satisfying regulatory and insurance requirements.

We can also help coordinate proper staff training.

MARINA OPERATIONS & MANAGEMENT PLAN



March 2019

TURRELL, HALL &
ASSOCIATES, INC.
Marine & Environmental Consulting
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TABLE OF CONTENTS

CHAPTER
1.0 SOLID WASTE DISPOSAL
2.0 RECYCLING
3.0 SEWAGE PUMPOUT
4.0 GRAYWATER PUMPOUT
5.0 STORMWATER MANAGEMENT
6.0 FISH CLEANING STATIONS
7.0 STRUCTURE REPAIR
8.0 COMPLIANCE WITH WATER QUALITY STANDARDS
9.0 NON-WATER DEPENDENT ACTIVITIES
10.0 WRITTEN NOTICE TO SLIP USERS
11.0 SIGNAGE
12.0 TRAINING
13.0 BLUE FLAG CERTIFICATION FOR BOATS
14.0 BLUE FLAG MARINA CRITERIA

ATTACHMENTS

1	SEWAGE PUMPOUT LOG
2	ENVIRONMENTALLY FRIENDLY BOAT CLEANING SUPPLIES
3	EMPLOYEE TRAINING GUIDES
4	ACCIDENT REPORT TEMPLATE



Hamilton Harbor, Naples, Florida



Reinforced concrete wing walls support racks and roof.



Exterior design with architectural enhancements.



60k & 30k capacity Wiggins Marina Bull fork lifts.

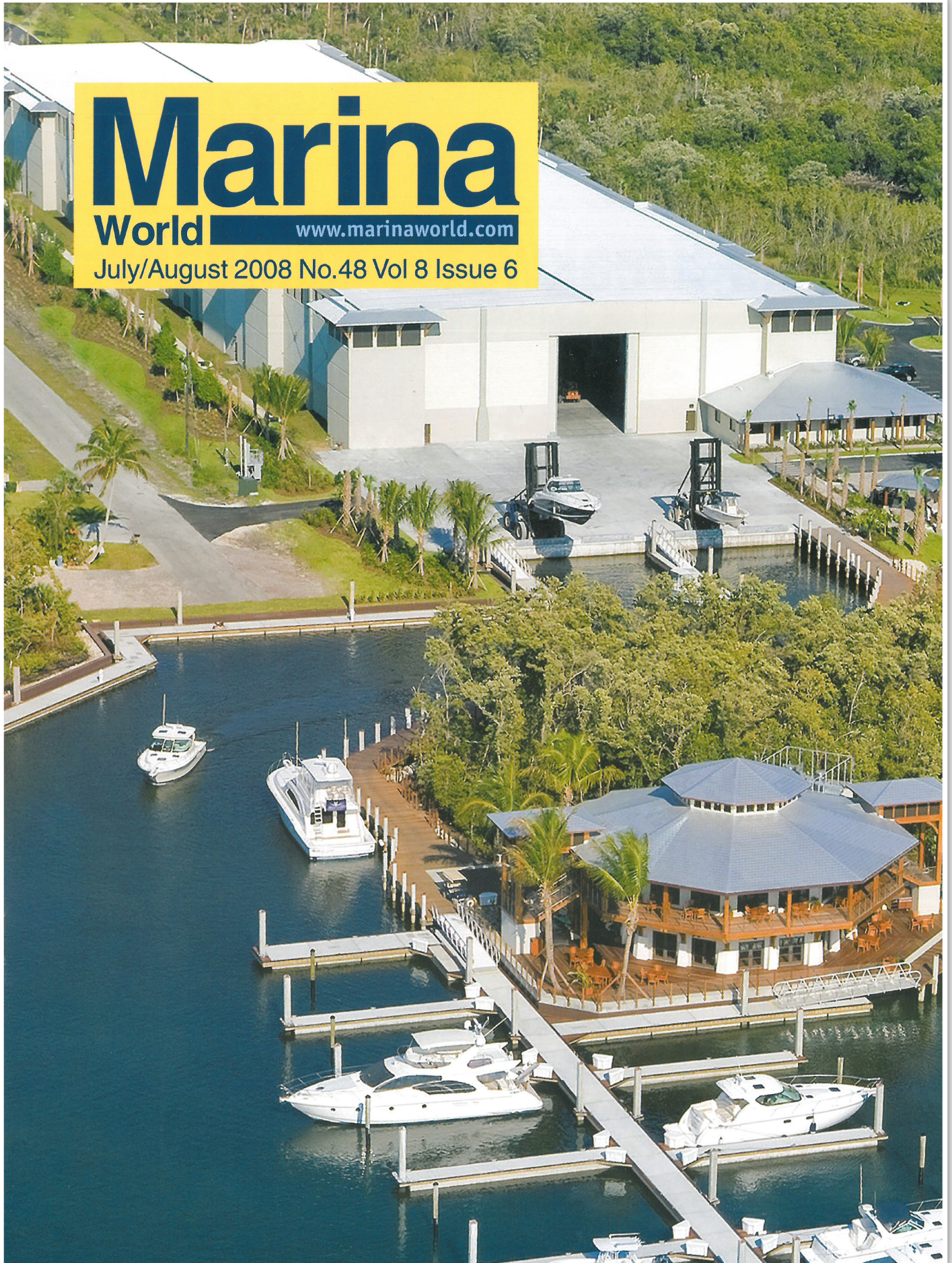


Marina

World

www.marinaworld.com

July/August 2008 No.48 Vol 8 Issue 6



Rose Marco River Marina, Marco Island, Florida



Our team provided the design, planning and coordination of the architect, engineering, and general contractor selection for this project at Rose Marina. This site features Dry Storage for 140 boats up to 45' LOA. The building has two stories of adjoining offices. The facility also has a 75 M.T. travel lift and 2 Wiggins Marina Bull fork lifts (22k & 45k capacity).





Concrete tilt wall construction and custom metal roof, steel bunk beams supported by concrete wing walls.



Architectural enhancements (such as the logo shown here) can be cast in concrete during construction.



Naples Boat Club, Naples, Florida



Overall view of Naples Boat Club at opening.



Dream Harbours provided planning, personnel training and management for the project.





Naples Boat Club is an excellent example of a marine mixed-use project that incorporates the following elements:

- *Hi & Dry boat slips (167)*
- *Marina with fuel dock (48 slips)*
- *Residential units*
- *Clubhouse with pool*
- *Commercial office units*
- *Restaurant*
- *Full service boat yard with 75 M.T. travel lift*



Carrabelle Boat Club, Carrabelle, Florida



A rack supported metal building with the capacity for 300 boats that are 25'-40' LOA. Also features a clubhouse, offices adjoined to building, and 2 fork lifts.



35' LOA bay section. Yellow bunk coverings for greater visibility to assist fork lift operator.





Close up of the clubhouse & harbor master operations office.



22k and 30k capacity Wiggins Marina Bull fork lifts.



Diversified Yacht Service Ft. Myers, Florida



Dream Harbours provided complete project design and equipment selection, including:

- *150 M.T. Travel Lift*
- *45k capacity Wiggins Marina Bull Fork Lift*
- *60 M.T. (metric ton) Self-Propelled Yard Trailer*





Custom travel lift slip.



150 M.T. travel lift, paint booth entrance are the grey two-story doors the left.



Nautico Marine, St. Petersburg, Florida



Nautico Marine has Dry Storage for 325 boats, with 4 launch ramps and multiple staging docks. The harbor master building on the right side gives the staff a panoramic view of the entire operation. This facility has fuel capability on both the water and upland.





35' LOA boat racks at Nautico. Blue bunk coverings for greater visibility to assist fork lift operator.



Pool area and chickee huts as part of the amenities available at the marina.



Gulf Star Marina, Ft. Myers, Florida (under construction)



Artistic rendering of the fully automated Dry Storage facility.



Boat storage bays with concrete wing walls and bunks under construction.





Water side view of the construction site.



Street side view of the concrete tilt wall Dry Storage building nearing completion.

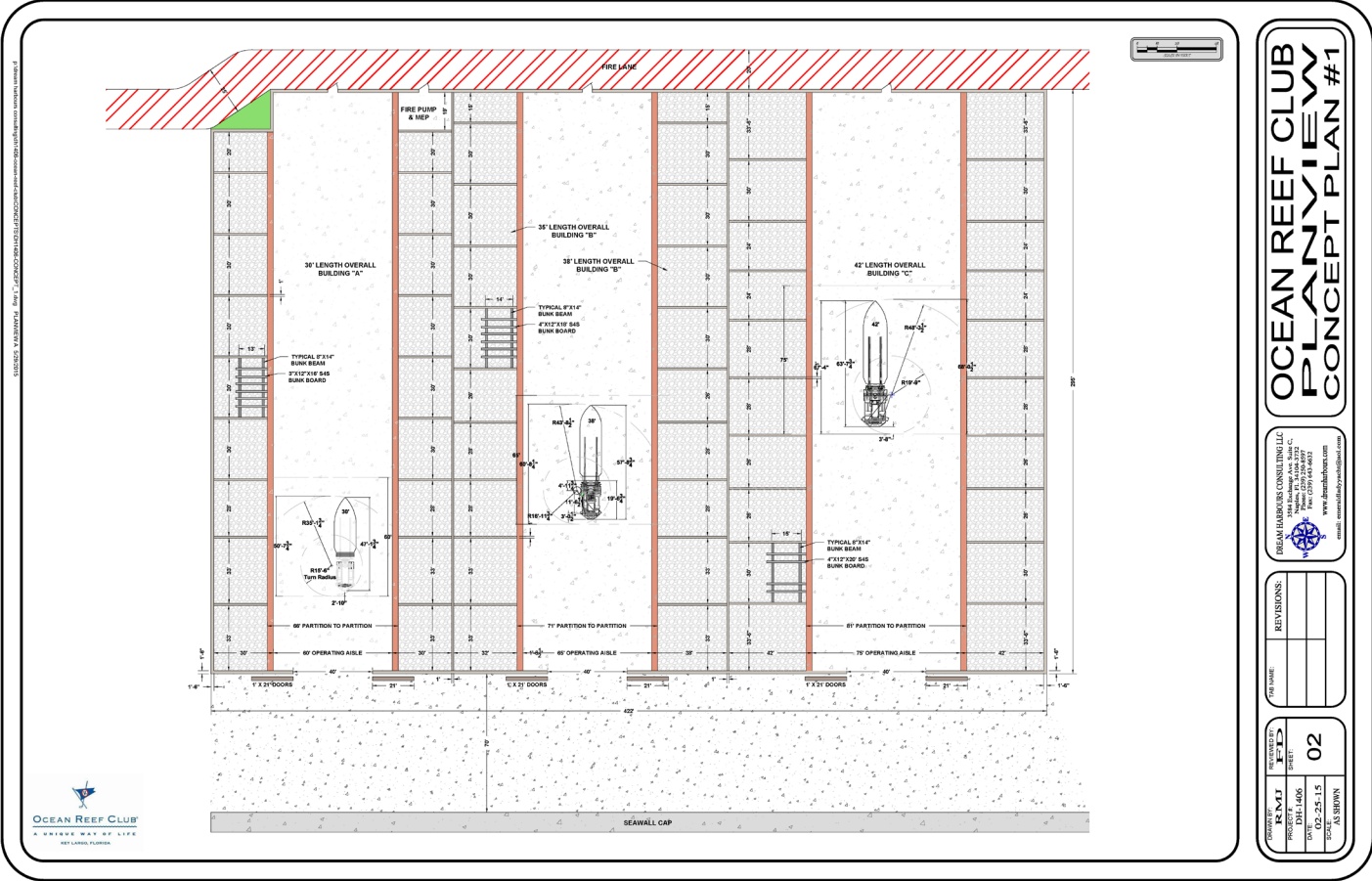




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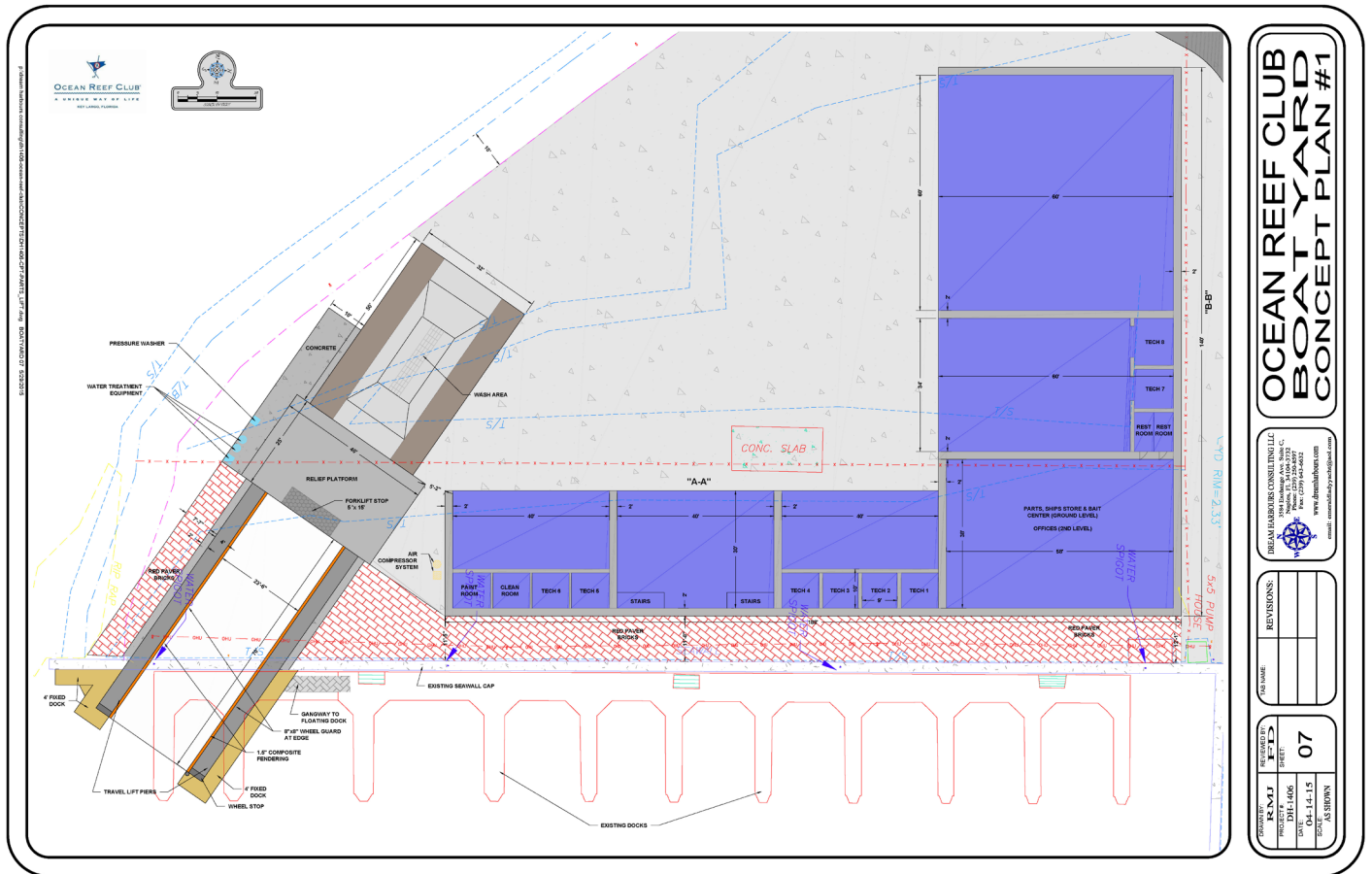
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Ocean Reef Club, Key Largo, Florida
(design work complete, in planning phase)

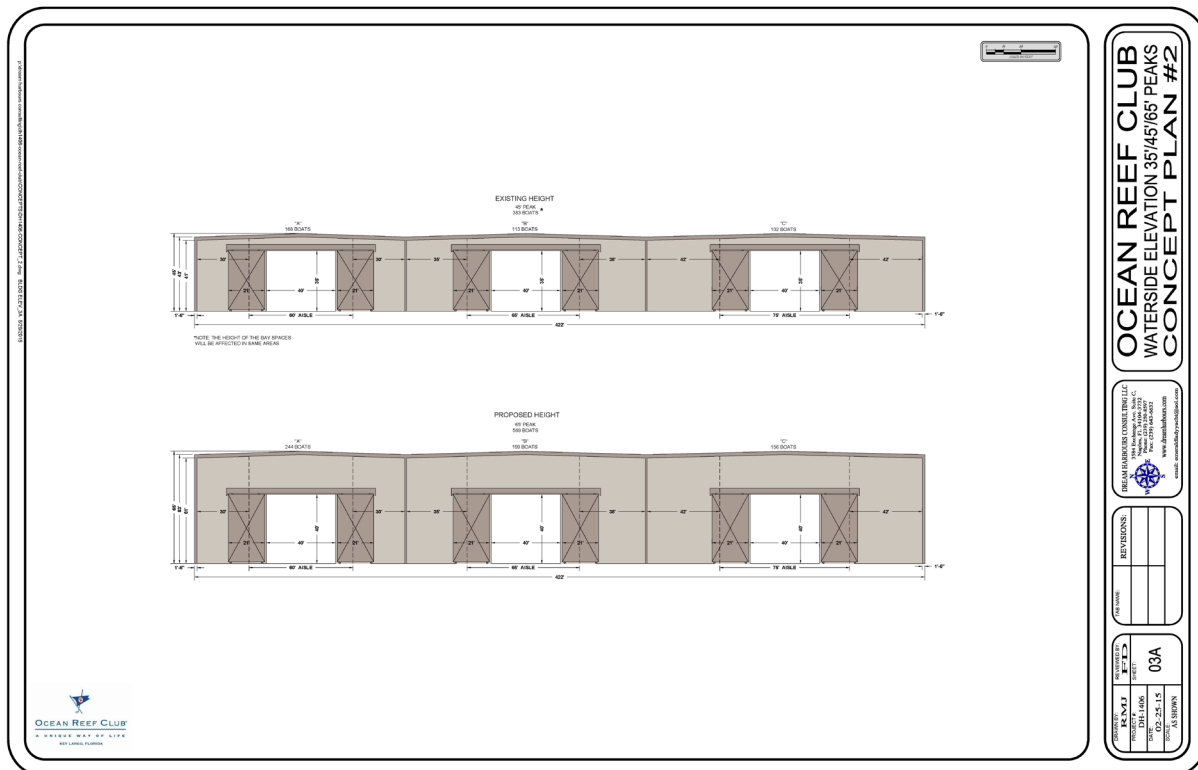


Interior plan view of building sections, with capacity for over 500 boats.





Drawings of the service yard, including the travel lift slip.



Different height elevations proposed for the Ocean Reef Club building.

