

# CASE STUDY

## ARMORMAX® Anchored Reinforced Vegetation System PROTECTS FLORIDA CANAL

### FLORIDA CANAL SLOPES STAY GREEN THANKS TO ARMORMAX® SYSTEM

#### BACKGROUND

Surrounding elements played a role in influencing the design of this canal where Regal Boats test drives their watercraft. The back side of the canal had limited area for construction and backed up to a fence. The west side of the canal had a pond located on the other side of the property line that made trenching somewhat difficult due to the water tables being high. But the west side did have a road which made access to the west somewhat easier. On the north side of the canal there is a wetlands area approximately 20 to 30 feet away and the water management district raised a level of interest not to disturb the wetlands. Based on this area the design of the canal was contoured accordingly.

#### DESIGN AND CONSTRUCTION

The budget for this project had initially come in over expected project cost when Fabra Form was specified to be used on the canal slopes for support and control. The plan was to use Fabra Form for the areas with high wave action from the boats being tested up and down the canal. In order to save time and money, ACF Environmental introduced ArmorMax Anchored Reinforced Vegetation System to the owner. ArmorMax consists of a High Performance Turf Reinforcement Mat (HPTRM) and earth percussion anchors. It is ideally suited for non-structural applications where additional factors of safety are need for scour and erosion protection. When compared to the Fabra Form, ArmorMax would provide the owners with significant savings in money and installation time. Although Fabra Form was specified for all areas, the

contractor decided to use ArmorMax in the areas where there would be less wave action from the boats. Time also played a role in the decision to use ArmorMax as the owners wanted this canal to be properly reinforced before the summer rains came. Since the material is easy to

#### PROJECT FILE

PROJECT ▶ REGAL BOATS

LOCATION ▶ ORLANDO, FLORIDA

DATE ▶ MARCH 2006

PRODUCT ▶ ARMORMAX® ARMORING SYSTEM

APPLICATION ▶ CANAL SLOPES

CONTRACTOR ▶ LYNDOL DEVELOPMENT



*The use of the ArmorMax® System allowed the project to proceed quickly and efficiently.*



*ArmorMax® System consists of HPTRM and earth percussion anchors*

▶ CONTINUED ON BACK

# CASE STUDY CONTINUED

handle and install, ArmorMax was a big help in getting the project finished properly and on time.

The design was based on what the owner wanted within the land available. The owner directed how the layout would be and the benefits became obvious with the amount of ArmorMax substituted instead of the fabric form. In addition, ArmorMax could also allow for aquatic life to be established and provided a more aesthetic look to the surrounding elements, especially with the wetlands adjacent to the canal.

## CONCLUSION

Regal Boats can now test the boats in their own backyard without having to haul them to the nearest waterway. ArmorMax will also hold up during the extremely hot temperatures and storms that are common in Florida.



*ArmorMax® System fully vegetated.*