



## PROJECT PROFILE

**Project Architect:**  
Ashley McGraw  
Architects

**Structural Engineer:**  
Klepper, Hahn & Hyatt

**Owner:**  
Onondaga County Parks  
Syracuse, New York

**Project Completion:**  
June 2005

**Project Cost:**  
\$2.8 Million

**2005 Silver Award  
Excellence in Concrete  
Design and Installation**  
American Concrete  
Institute - Central  
New York Chapter

## PENGUIN COAST EXHIBIT ROSAMOND GIFFORD ZOO AT BURNET PARK



**Penguin Exhibit for the Rosamond Gifford Zoo, Syracuse, New York**

## SCOPE OF WORK

Concrete in a variety of forms and applications duplicated the native habitat for a flock of Humboldt penguins at the Rosamond Gifford Zoo at Burnet Park. The *Penguin Coast* Exhibit was designed to replicate the rocky South American coastline of Chile and Peru.

Concrete was used to construct the 50,000-gallon freshwater pool, simulate the cliffs and rock burrows for nesting, and structurally support buildings. Six different windows allow observers to view penguins swimming underwater, waddling along the shoreline, and exploring their indoor holding area. The Life Support System Building and the Husbandry Building are generally hidden from

view by the positioning of artistic concrete rockwork.

Some of the acrylic viewing panels are submersed by varying degrees, and these demanded tight concrete tolerances. The replicated rockwork was achieved with four-inch-thick colored shotcrete applied to a rebar grid. The rebar is supported by galvanized structural steel where required. Fresh concrete was carved to simulate the appearance of rock.

The support buildings incorporated cast-in-place footings and foundation walls, concrete slab-on-grade floors, concrete masonry bearing walls and partitions, and precast hollow concrete plank floors.