



**Monmouth County's Oceanic Bridge (S-31) over the Navesink River is closed to motor vehicle, bicycle and pedestrian traffic for repair work to rehabilitate the bridge's 100-foot, center bascule span.**

### **What type of work is being done?**

The rehabilitation work on the 72-year old double-leaf bascule span includes the removal of the existing grid deck and construction of a new grid deck. The work also includes the rehabilitation or removal and replacement of stringers, floor beams, supporting

steelwork and a catwalk. Additionally, work to strengthen structural steel and to repair mechanical and electrical systems is being done along with cleaning and painting of the existing bascule span steel.

### **Why does the bridge have to be closed for such a long period of time?**

The work requires that the center, movable sections of the bridge be removed and resurfaced and that work to the machinery, motor brakes and bascule span lock mechanism be done. As parts are taken out of service, they are repaired, reinstalled and tested in phases. Work on several bridge elements are being done simultaneously to limit the length of time the bridge is closed.

### **What is the status of the work?**

The project is continuing on schedule with the goal of reopening the bridge for vehicular and pedestrian traffic for Memorial Day weekend.

In March, the contractor installed new floor beams, bracing and roadway stringers. The installation of the toe and heel joint diaphragms, toe joint castings, bracing and gusset plate connections, and stringer to floor beam connections are now 90 percent complete. On the north leaf, the attachment of the roadway grating to the top flange of the new stringers is being welded; a web repair near the rack on the northwest girder is on-going and requires the span to be opened to provide adequate space between the girder and the pier wall to operate the magnetic drill. Web repairs are also in progress on the southeast and southwest girders.

Electrical and mechanical work on the bridge continues. The installation of the south leaf navigation lighting conduit and wiring, limit switches, motor and machinery brake wiring are 85 percent complete. The motor upgrade, including a new auxiliary driver, reducer couplings and brake hubs continues.

Weather permitting, painting on both the north and south leaves of the bascule spans will continue. With the steel cleaning operation mostly complete, painting now consists of touching up previously primed and top coated areas that were impacted by the steel repair work. A finishing coat is being applied to already primed south leaf areas: bascule span girders, intermediate floor beams, cantilevered brackets and fascias. A finishing coat on the north leaf was applied to touched up areas as well.

### **How did the bridge get to be in this condition?**

The 72-year old Oceanic Bridge is a heavily used bridge in a salt water environment. Cars and other vehicles are much heavier now than when the bridge was built. For that reason there was a 3-ton weight restriction on the bridge prior to the start of this repair work. The bridge's constant exposure to ocean air and salt water has contributed to the oxidation and deterioration of the bridge's metal and cement parts.

## When will the bridge reopen to traffic?

Weather permitting, the work is to be completed in time for Memorial Day weekend 2012.

## Why is the bridge's center section left open?

There two reasons. First, to accommodate marine traffic, one section of the bridge's double-leaf bascule span will be kept in the upright position. Second, each span will have its power deactivated for repairs.



Installation of the motor brake in progress.

## Why is this a Monmouth County project?

The county-owned Oceanic Bridge connects Bingham Avenue in Rumson to Locust Point Road in Middletown; both are county roads. Monmouth County owns, operates and maintains the Oceanic Bridge and three other movable, draw bridges as well as 976 other bridges and culverts throughout the 427-square mile county. All of these structures are monitored and maintained by the county's Department of Public Works and Engineering. The Monmouth County Board of Chosen Freeholders oversees the operation of county government infrastructure, activities and programs.

## Who is doing the work to rehabilitate the bridge?

The work is being done by the Iron Bridge Group, Inc. of North Brunswick with oversight by county's Department of Public Works and Engineering. The contract amount of the rehabilitation project is \$3,554,380.

## Where may I get more information about this project?

Information about the Oceanic Bridge and other county road and bridge projects is available on the Engineering Division's [Roads and Bridges section](#) of the county Web site at [www.visitmonmouth.com](http://www.visitmonmouth.com).

## What is the detour route?

From Middletown, traffic can either travel through Red Bank and Fair Haven to Rumson or through Highlands and Sea Bright to Rumson.

The green route from Rumson is detoured east through Fair Haven and Red Bank on East River Road (CR-10) to East Front Street to Route 35 North to Navesink River Road (CR-12A) in Middletown.

The red route from Middletown is Navesink River Road (CR-12A)/ Locust Point Road (CR-8B) turning onto Locust Avenue and then turning right onto Navesink Avenue and the onto Route 36 South through Highlands and into Sea Bright. Turn right onto the Rumson-Sea Bright Bridge and follow Rumson Road (CR-520) west to Bingham Avenue. Turn right onto Bingham Avenue (CR-8).

