



Rehabilitation and Miscellaneous Repair  
 William V. Roth, Jr. Bridge  
*Inland Waterway, Delaware River to Chesapeake Bay*

**Work / Activity 1**  
**Concrete & PT Repairs**

**Work / Activity 2**  
**Stay Cable repairs**



**Description of the work**

The William Roth cable-stayed bridge, a prestressed concrete externally post-tensioned segmental bridge of 4,650 feet long and 127 feet wide was opened to the public on December 23, 1995. After an in-depth inspection performed in 2013, it was determined that the bridge was in need of structural repairs. Freyssinet, Inc. was awarded the project as General Contractor.

**General Contractor :** Freyssinet, Inc.  
**Owner :** US Army Corps of Engineers

**Subsidiaries :**

**Beginning of works :** 4/15/15  
**End of works :** 10/06/15

**Freyssinet Mission**

In the interior and exterior of both, north- and south-bound box girders, the stay cable pylons, delta frames and box piers, the repairs included: reconstruction of deteriorated PT anchorage pour backs, repair of PT ducts, installation of electrical conduit expansion joints, replacement of electrical junction boxes, epoxy crack injection and concrete rehabilitation.

Above deck level, the work included deck repairs using latex modified concrete, repairs of stay cable components such as splice sleeves, grout plugs, and saddle pipes. All repaired parts of the steel stay cables were painted with moist-cured urethane paint system to match the existing color of the stays. The delta frames required epoxy crack injection and concrete rehabilitation. The top of both pylons required installation of stainless steel anchor points that will be used for safety tie-off points.

