



TACONY-PALMYRA BRIDGE

Location: Philadelphia, Pennsylvania

Project: Emergency Inspection & Debris Removal

Description: W.J. Castle, P.E. & Associates, P.C. was retained by the Burlington County Bridge Commission to perform an emergency underwater inspection of the timber fender system at Pier E of the Tacony-Palmyra Bridge. Impact damage from ice flows had caused excessive damage to the fender system. During our inspection, we found that the west nose of the fender system had totally separated from the rest of the fender, and was now lying along the channel bottom. Our Company was requested to perform the engineering necessary to analyze the procedure needed to remove the large sections of fallen fender system. After the engineering portion of the project was complete, CASTLE was responsible for the all field supervision and construction management during the process of removing the debris. Divers from our Company attached the rigging from a barge crane to the fallen debris, which was then uploaded onto a debris skow.



JD069.doc



The Castle Group
Innovation in action

W.J. Castle P.E. & Associates
Hydro-Marine Construction
Simplified Bridge Systems

**Sets the
Standard for**

• • • •

**Structural &
Marine
Engineering,
Construction,
& Design/Build
Services**

Main Office

Tynddol Building
1345 Route 38 West
Hainesport, NJ 08036

Regional Office:

Philadelphia, PA

1-800-644-4713
www.wjcastlegroup.com