

NJTPA Bridge Scour Protection

Garden State Parkway
Mile Posts: 28.0, 51.9, 158.2
New Jersey

UNDERWATER CONSTRUCTION INSPECTION

Atlantic Engineering, LLC was contracted by Jacobs Engineering Group Inc. for the New Jersey Turnpike Authority to perform the inspection of scour repairs for three bridges along the Garden State Parkway at mile posts 28.0, 51.0, and 158.2.



Bridge, Riprap & Construction Inspection

Inspection work performed by Atlantic Engineering included pier inspection to determine the extent of spalling, construction inspection to confirm sufficient spall repairs and riprap inspection to determine proper placement of stone riprap for scour protection. The new timber fender systems located at Piers 17 and 18 at mile post 28 were also inspected for proper installation of all hardware. Documentation of the dives included sketches and photographs

Atlantic Engineering, LLC has performed inspections and performed repairs at numerous job sites and is proficient in all aspects of underwater inspection, design, and construction. We serve as the “eyes” for the client who is personally unable to observe the underwater work being performed.

**NJTPA
BRIDGE INSPECTION of
SCOUR PROTECTION**



Atlantic Engineering LLC

170 Kinnelon Rd. Suite 36

Kinnelon, NJ 07405

Phone (973) 838-3100

Fax (973) 838-2980

EMAIL ATLANTICDV@AOL.COM

WWW.ATLANTICENGINEERING.ORG

Bridge Inspection NJDOT & NJ County Bridges

Atlantic Engineering, LLC has performed numerous underwater inspections of New Jersey Bridges. Work is performed in accordance with NJDOT Underwater Inspection and Evaluation of New Jersey Bridges Guidelines. Responsibilities included report preparation, photo documentation, repair recommendations. Equipment utilized included boats, Surface Supply Hard Hat, Voice Communication, Video and 35mm photography and testing. Large bridge projects have also included Fathometric surveys and scour evaluation.



OCEANIC BRIDGE OVER NAVESINK RIVER, RED BANK, NJ

Atlantic Engineering has the equipment and P.E. Divers to handle large scale and small scale projects. Various sized boats and surface supplied dive gear give the mobility required for hard to reach sites and provide accurate documentation.



NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURAL EVALUATION
UNDERWATER DIVER INSPECTION
GENERAL DATA

Bridge No. _____ Date of Underwater Inspection _____
Route No. _____ M.P. _____ Dist. _____
Name _____ Team Leader _____
Company _____ Company _____
Temperature _____ Weather _____
Equipment Used _____

ABUTMENTS
ROUTE _____
BRIDGE NO. _____

COMPONENT/ MATERIAL	Condition
Breakwall	
Footing	
Wingwall/ Retaining Walls	
Others	

Repair Quantities _____

PIERS
ROUTE _____
BRIDGE NO. _____

COMPONENT/ MATERIAL	Condition
Pier Cap	
Pile/ Column	
Footing	
Other/ Fender	

Repair Quantities _____

**COMPONENT/
MATERIAL**

COMPONENT/ MATERIAL	Condition
Breakwall	
Footing	
Wingwall/ Retaining Walls	
Others	

Repair Quantities _____

RATINGS

N Not Applicable
9 Excellent Condition - no problems noted.
8 Very Good Condition - some minor problems.
7 Good Condition - some minor deterioration of structural elements.
6 Satisfactory Condition - some minor deterioration of primary structural elements.
5 Fair Condition - minor section loss of primary structural elements.
4 Poor Condition - advanced section loss of primary structural elements.
3 Serious Condition - seriously deteriorated primary structural elements.
2 Critical Condition - facility should be closed until repairs are made.
1 Imminent Failure Condition - facility is closed. Study if repairs feasible.
0 Failed Condition - facility is closed and beyond repair.

GENERAL
Type of Superstructure _____
Type of Substructure _____
Number of Substructure Units in Water: Abutments _____ Piers _____
Overall Condition of Substructure _____

WATERWAY
Type: _____ Velocity: _____
Scoured Material: _____

ROUTE 46 OVER THE PASSAIC RIVER

Atlantic Engineering LLC
170 Kinnelon Rd. Suite 36
Kinnelon, NJ 07405
Phone (973) 838-3100
Fax (973) 838-2980
EMAIL ATLANTICDV@AOL.COM
WWW.ATLANTICENGINEERING.ORG

Bridge Inspection Cape May County, Route 52 Bridges

Atlantic Engineering, LLC has performed underwater inspections of numerous Cape May County bridges including those bridges that carry Route 52. Work is performed in accordance with NJDOT Underwater Inspection and Evaluation of New Jersey Bridges Guidelines. At the time of the most recent inspections, Atlantic Engineering, LLC recommended interim repairs for both structures prior to replacement. Responsibilities included underwater inspection, report preparation, photo documentation, and repair recommendations. Equipment utilized included boats, Surface Supply Hard Hat, Voice Communication, Video and 35mm photography and testing. Large bridge projects have also included Fathometric surveys and scour evaluation.

PREVIOUSLY INSPECTED STRUCTURE LOCATIONS



BRIDGE # 0511-151 OVER RAINBOW THOROFARE PILE DAMAGE

Atlantic Engineering has the equipment and P.E. Divers to handle large and small scale projects. Various sized boats and surface supplied dive gear give the mobility required for hard to reach sites and provide accurate documentation.



BRIDGE # 0511-152 OVER ELBOW THOROFARE

Atlantic Engineering LLC

170 Kinnelon Rd. Suite 36

Kinnelon, NJ 07405

Phone (973) 838-3100

Fax (973) 838-2980

EMAIL ATLANTICDV@AOL.COM

WWW.ATLANTICENGINEERING.ORG