AI Engineers, Inc.

*An Integrated Approach to Infrastructure Solutions*

# Kent Dam Spillway Bridge

Scituate, RI

## Project Description:

**Location**
Scituate, RI

**Owner**
David Fish
RIDOT
2 Capitol Hill
Providence, RI 02903
(401) 222-2053x4022

**Duration**
2002 – Present

**Prime/Sub**
Prime

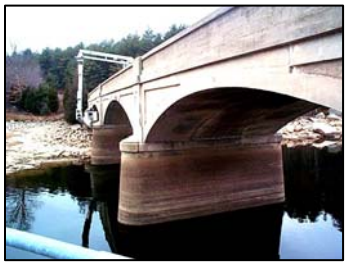
**Project Cost**
$15,000

The Kent Dam Spillway Bridge is a representative example of an early Twentieth-Century, multiple span concrete arch highway bridge. It is unusual and significant for its size, unique variant decorative scheme, and association with a major public work project.

The Kent Dam Spillway Bridge is eligible for listing in the National Register of Historic Places under Criteria A and C at the local and state level in the areas of transportation and engineering. Therefore it is important to reconstruct the bridge to resemble its original condition both architecturally and aesthetically.

The scope of AI's assignment was to collect data and to review the previous inspection report, existing plans, a 1991 underwater inspection report, and perform a condition survey to identify the critical deficiencies which require immediate maintenance or major rehabilitation. The condition survey consisted of a hands-on inspection of all bridge components wherever accessible. The condition survey located all the existing structural deficiencies and deterioration of the structure which were in need of immediate attention. The identification of section properties and member sizes were also obtained in order to confirm data listed in the existing plans for the performance of a load-rating analysis. Public Archaeology Laboratory (PAL) in Pawtucket was hired to perform a consensus determination of the historic eligibility of the bridge.

An engineering study report was submitted to RIDOT detailing all the structural deficiencies which were in need of immediate attention, long term rehabilitation requirements for the structure, with alternative studies which will address the most effective options to move forward with the rehabilitation of the structure.



**Salient Features**

- Bridge Inspection per NBIS guidelines
- Non-Destructive Testing
- Capacity Analysis
- Condition Study Report