

## List 18 - Bridge Design

Norfolk, Waterbury, Wolcott; CT

### Project Description:

#### Location

Norfolk, Waterbury, Wolcott;  
CT

#### Owner

ConnDOT

#### Duration

2005-Present

#### Prime/Sub

Prime

#### Project Cost

\$2.5 million

As part of AI's ConnDOT List 18 assignment, AI prepared schematic design, preliminary and final construction documents and specifications for bridges located in the city of Norfolk, Waterbury and Wolcott in Connecticut. The extent of scope for these bridges varies from rehabilitation of the structure to full replacement.

#### **Bridge #05423, Norfolk, CT**

- Remove/clean the deteriorated steel wall portion at the arch footing.
- Reconstruct/widen the arch support and extend the arch support footings to cover the deteriorated steel wall portions.
- Construct new parapets consisting of an approved open rail system with concrete rail bases and end blocks. Also install metal beam rail at the approaches.
- Re-point the masonry headwalls and wing walls as needed and reconstruct slab on over the arch.

#### **Bridge #02448, Waterbury, CT**

- Replace the existing structure with precast concrete box culvert constructed on the same alignment and location as the existing bridge. Also construct flared wingwalls at the inlet and U wingwalls at the outlet of the channel.

#### **Bridge #03075, Wolcott, CT**

- Replace the existing Bridge with new clear structural slab structure.
- Replace the existing substructure and foundations. Reconstruct all the approach roadways.

Each of these assignments required the preparation of environmental documentation and permits for bridges over water courses and adjacent to wetlands, public hearing plans and meetings, utility coordination, traffic control/ maintenance and protection of traffic, approach roadway improvements to meet current roadway & roadside safety and storm water management. The assignments included preparing quantity and cost estimates. Easement and right-of-way mapping was prepared as necessary.

#### Salient Features

- Bridge Design
- Staging Plans
- Maintenance And Protection Of Traffic
- Hydraulic Analysis
- Permitting

