

Project: D214006, Design Services for Movable Dam 4 & SE Wall at Lock E-8

Location: Albany Division; City of Schenectady, Towns of Glenville and Rotterdam

Client: New York State Thruway Authority/New York State Canal Corporation

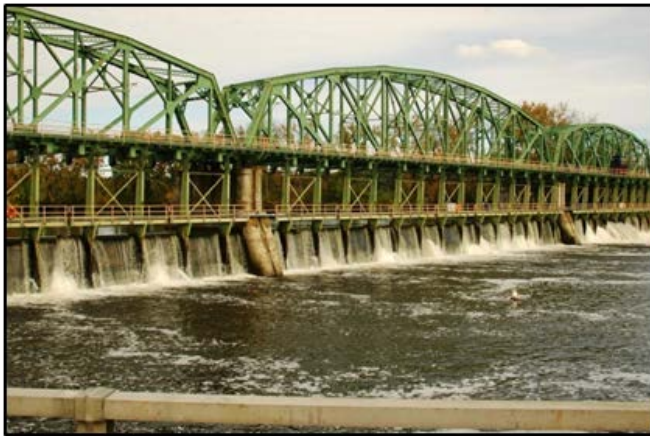
Cost: \$143K (Survey Fee)

Year: 2012–2014

Work Performed:

- Horizontal & Vertical Control
- Concrete Coring
- Substructure Inspection & Design
- Concrete Rehabilitation
- Structural Steel/Scour Repairs
- Mechanical/Electrical Rehabilitation

This project entailed the rehabilitation of Movable Dam 4 and the Southeast Approach Wall at Lock E-8 on the NYS Barge Canal System in the Albany Division. Lock E-8 is located at the western end of the City of Schenectady in the Towns of Glenville and Rotterdam, New York. Prudent conducted site investigation, inspection of structural components, concrete coring, detailed substructure dam design, preliminary design, detail development and final design phases.



Movable Dam 4

The scope of work on Movable Dam 4 included: full rehabilitation of the concrete piers, abutments and apron; rehabilitation of deteriorated steel members on the steel truss superstructure, gates, and uprights; and rehabilitation of the mechanical and electrical

components. The work also addressed the Southeast Approach Wall, specifically concrete re-facing, scour repairs, and the replacement of lighting systems.

Prudent also conducted substructure inspection, concrete coring, design and detailing for dam substructure rehabilitation, and remedial design. Additional tasks included preparation of Chapters 2 and 3 for the concrete elements of the Canal Rehabilitation Project Report (CRPP). In addition, survey services included establishing horizontal and vertical control, topographic survey, hydraulic survey, utility locations, geotechnical survey, wetland locations, R-O-W and property line survey, and processing field data into useful base mapping files. To address safety concerns, Prudent prepared and implemented a safety plan for the field crews that reviewed the site-specific hazards of working on and around the movable dam.



Movable Dam 4