## Project Description State Project 0073-0194 Replacement of Bridge No. 02231 – Route 202 Over Still Brook Town of Litchfield

**Location:** This project involves Bridge 02231 which carries Route 202 over Still Brook in Litchfield. The bridge is located at mile post 34.58, approximately 0.5 miles west of the intersection with Route 209.

**Purpose and Need:** Constructed in 1928, the existing structure is a single span concrete slab bridge, approximately 15' long with a 29'-8" curb to curb width. The concrete deck slab sits on masonry abutments. The existing structure maximum span is 12' and the deck width is 32'-1" out to out. The average daily traffic (ADT) is approximately 7,300 vehicles per day with 6 percent truck traffic (2015).

The most recent Routine Inspection Report (03/24/2021) assigned the superstructure a rating of '4', indicating that the superstructure is in poor condition. The existing substructure is currently rated a '5'.

The inspection report noted the following concerns with the current condition of Bridge No. 02231 that need to be addressed:

- Concrete deck slab underside deterioration consisting of spalls, hollow areas, and efflorescence seepage.
- 3"-4" deep delamination that follows rebar from stem to stem. Heavy rust and minor section loss to exposed rebar. Due to large area of delamination from the bottom of the rebar from stem to stem on the west side, the concrete slab was lowered from '5' "Fair" to '4' "Poor".
- Abutment stems have voids, cracks, and mortar loss.
- Wingwalls are rated a '4' "Poor", the NW wingwall cap exhibits areas of loose and shifting stones.

Due to the extent of the deterioration of the existing bridge, Project 0073-0194 was initiated to replace the bridge.

**Description:** The project is currently in the preliminary design phase and the exact scope of the project work is being determined. Based on the condition of the superstructure and the age of the substructure, the existing bridge is proposed to be replaced. The preferred replacement structure type is a full integral abutment type structure using NEXT beams to replace the superstructure with a clear span of 31 feet and out-to-out width of 34 feet 6 inches.

The hydraulic adequacy of the bridge and soil conditions will be investigated.

## **Current Schedule:**

Design Approval	02/08/2023
FDP	11/22/2023
DCD	01/03/2024
ADV	01/31/2024

