

Project Description
State Project 0105-0221, F.A.P. No. N/A
Raise the Superstructure of Bridge No. 02708 Carrying
Route 154 over Plum Bank Creek
Town of Old Saybrook

Location: This project involves raising the superstructure of Bridge No. 02708 that carries Route 154 (Plum Bank Road) over Plum Bank Creek in the Town of Old Saybrook. The Bridge is located at log mile 1.15 of Route 154 and 1.1 mile south of Route 1.

Purpose and Need: Originally constructed in 1958 and fully replaced in 2021, the existing structure is a single span fully integral abutment bridge. The superstructure is comprised of eleven prestressed concrete deck units composite with a reinforced cast-in-place concrete deck. The span of the bridge is 43'-0" long with a 30'-0" curb to curb width. The superstructure spans over precast concrete abutments founded on a single row of cast-in-place concrete pipe piles. Surrounding the abutments is heavy riprap and permanent sheet piling cofferdams used to prevent scour. The average daily traffic (ADT) is approximately 3,600 vehicles per day with 2 percent truck traffic (2019).

The current bridge was built with a low chord elevation lower than its previously existing low chord elevation. The elevation should be increased to ensure coastal and recreational access to comply with the coastal regulations.

Description: The superstructure of the bridge will be raised under this project to restore its original low chord elevations. In order to raise the superstructure to the required elevations, a full abutment width horizontal cut will need to be applied at the bridge seat level along the full length of the abutment to separate the entirety of superstructure from the substructure. The superstructure will then be hydraulically jacked to the proposed elevation. When at the proper elevation, the structure will be temporarily supported while the deck ends are reinforced and reconstructed. Sandbag cofferdams are proposed to be utilized as part of the water handling scheme during the construction activities.

The vertical alignment of the roadway will need to be raised to accommodate the increase in bridge superstructure low chord elevation. Embankments will also need to be raised along the shoulders and the guiderail and bridge attachments will need to be reset along the raised embankment.

Maintenance and Protection of Traffic: The road will need to be closed to traffic approximately 8-10 weeks to perform the bridge and roadway work outside the beach season (Memorial Day – Labor Day). Prior to the closure for bridge and roadway work, a secondary road closure limited to 2-3 weeks may be needed for temporary water main and overhead utility relocation.

Utilities: There is an existing water main owned by Connecticut Water on the eastern bridge deck overhang. The main will be relocated temporarily, and then restored back to its existing location on the bridge deck. There are overhead utility lines that require temporary relocation during construction for horizontal clearance.

Permits: The following permits are anticipated for this project:

- Individual Flood Management Certification
- 401 Water Quality Certification via DEEP-LWRD
- Structures, Dredging, Fill and Tidal Wetlands (OLISP)
- ACOE PreConstruction Notice (PCN) – Eng. Form 4345

Rights of Way: All work within the project area will be within the State's Right of Way.

Current Schedule:

Design Approval: 9/23/2026

FDP: 10/20/2027