

WESTCHESTER COUNTY STREAMS, BYRAM RIVER BASIN, CT & NY FLOOD RISK MANAGEMENT PROJECT

Public Meeting
Town of Greenwich, CT

22 April 2025 at 7PM

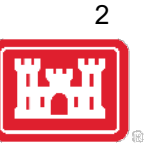


US Army Corps
of Engineers®





BYRAM RIVER FLOOD RISK MANAGEMENT AGENDA



- Introduction
- Background
- Recommended Plan
- Cost Estimate and Cost Share of the Recommended Plan
- Design/Construction Consideration
- Design Scope of Work
- Design Status Update
- Design Schedule



BYRAM RIVER FLOOD RISK MANAGEMENT HISTORY

3



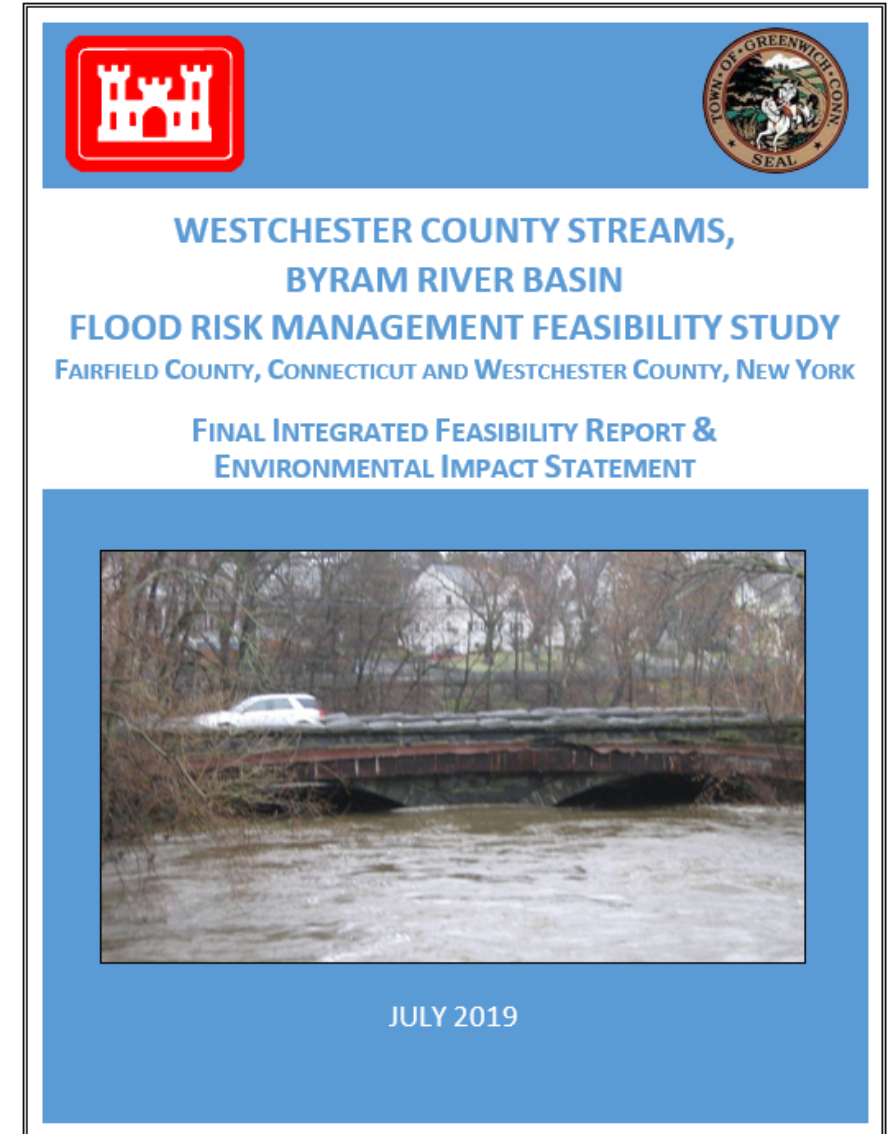
The Byram River Basin feasibility study was conducted to determine if there is a technically feasible, economically justifiable, and environmentally acceptable recommendation for federal participation in a flood risk management project.

A Final Integrated Feasibility Report and Environmental Impact Statement was completed, **recommending the removal and replacement of the two U.S. Route 1 bridges** on the border of Port Chester, NY and Greenwich, CT.

The study was completed in 2020.

The project was authorized in Section 340 of Water Resources Development Act (WRDA) of 2020.

The design phase was initiated in April 2023 with execution of the Design Agreement with Town of Greenwich as the non-Federal Sponsor for the project.



BYRAM RIVER FLOOD RISK MANAGEMENT RECOMMENDED PLAN

The recommended plan proposes removal of the U.S. Route 1 bridges and replacing them in the same footprint at a higher elevation and with no center piers.



One of the existing U.S. Route 1 bridges

The existing U.S. Route 1 bridges constrict the flow of the Byram River, increasing the water surface elevation upstream of the bridges and inducing flooding.

- Large central piers
- Low roadway profiles

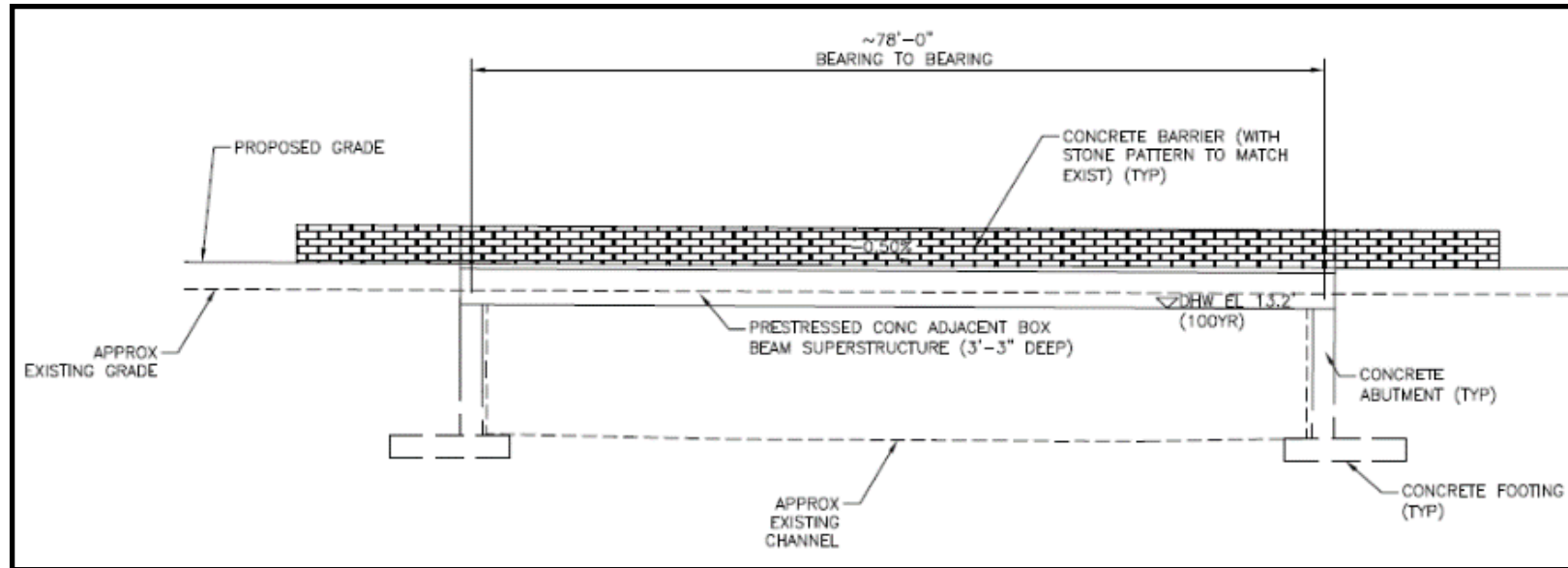
BYRAM RIVER FLOOD RISK MANAGEMENT PROJECT LOCATION



1. West Putnam Avenue/ U.S. Route 1 Eastbound Bridge over Byram River, Port Chester, New York and
2. Hillside Avenue/ U.S. Route 1 Westbound Bridge over Byram River, Port Chester, New York, for the purpose of flood risk management.

BYRAM RIVER FLOOD RISK MANAGEMENT RECOMMENDED PLAN

The recommended plan proposes removal of the U.S. Route 1 bridges and replacing them in the same footprint at a higher elevation and with no center piers.



Conceptual design of new bridges

The proposed U.S. Route 1 bridges would not have central abutments and would have higher roadway profiles. The bridges would manage flood risk by:

- Reducing the floodplain extent,
- Reducing water surface elevations during riverine events, and
- Decreasing the risk of flood damages to structures



BYRAM RIVER FLOOD RISK MANAGEMENT PROJECT COST ESTIMATE & SPONSOR



Pre-Construction Engineering & Design Cost Estimate (PED): \$5,470,000

Project Cost Share: PED is 100% Federally Funded. Construction will be cost shared 50% Fed and 50% Non-Fed.

Project Appropriations: Disaster Relief Supplemental Appropriations Act of 2022 (DRSAA) appropriated \$5.4M for PED and \$35M for construction.

Non-Federal Sponsor: Town of Greenwich

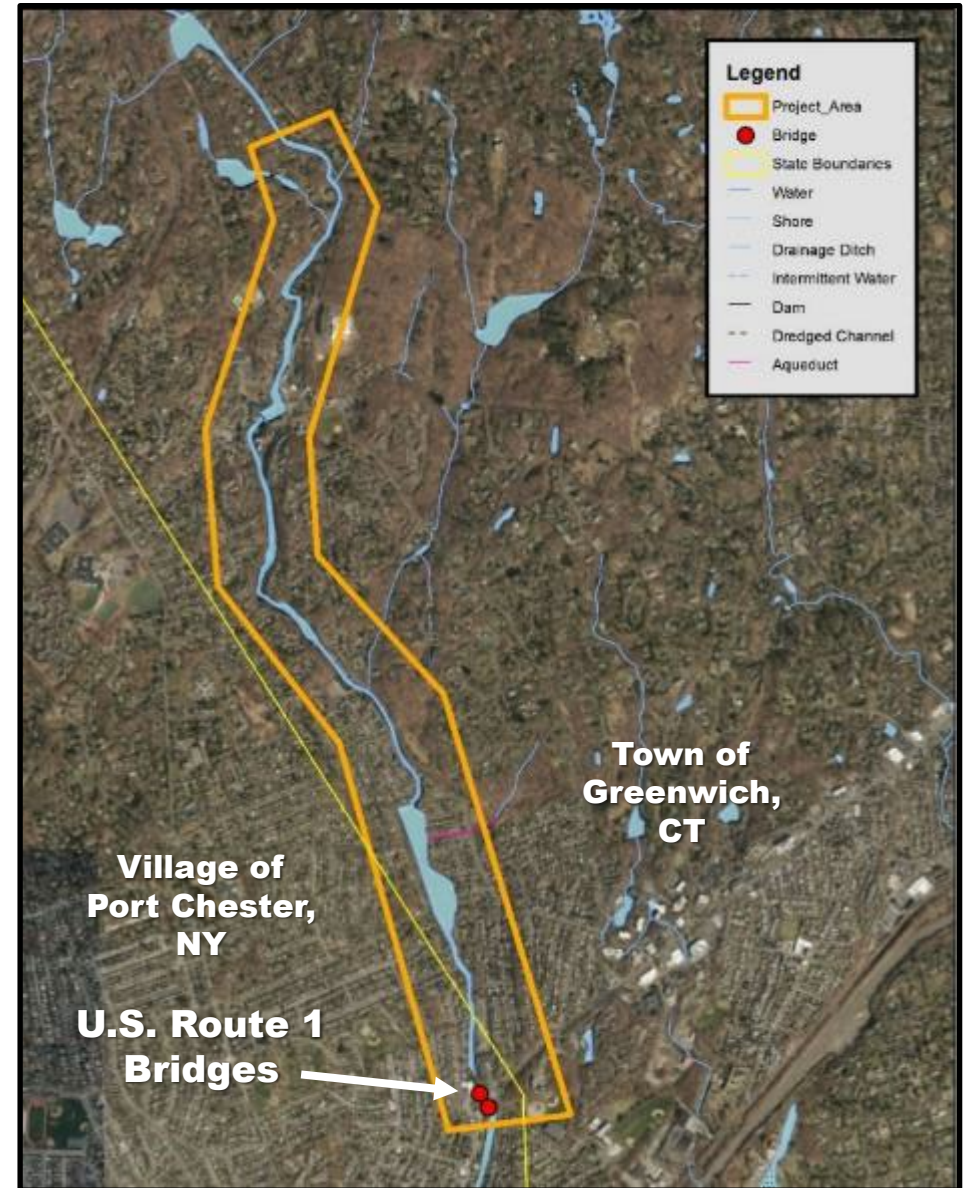
Key Partners/Stakeholders:

NY State Department of Transportation

CT Department of Transportation

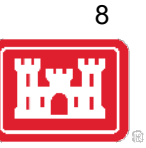
Village of Port Chester, NY

NY State Department of Environmental Conservation





BYRAM RIVER FLOOD RISK MANAGEMENT DESIGN/CONSTRUCTION CONSIDERATION



- Phased construction to ensure maintenance of traffic/continued connection/
 - One bridge will be replaced each year.
- New bridges will support the same traffic volume and maintain similar flow pattern as existing bridges.
 - Connecting roads will have to be raised to match new bridge elevation.
- Real Estate Acquisition including temporary and permanent easements
 - Consideration will be given for potential long lead time for easements
- ENV permits required from both NY and CT
- U.S. Route 1 Bridges are eligible for the National Register of Historic Places
 - Mitigation activities are underway in coordination with the New York and Connecticut State Historic Preservation Offices; i.e. documentation of bridges prior to demolition and sympathetic design of replacement bridges



BYRAM RIVER FLOOD RISK MANAGEMENT DESIGN SCOPE OF WORK



Byram River Bridge Scope of Work (SOW) outlines all tasks, design requirements, investigations, and coordination that is required for the design of the project.

- Project Design Requirements – In accordance with Federal, State, and Local design guidelines & standards.
- Coordination with USACE, A/E, State and local stakeholders such as Town of Greenwich, Village of Port Chester, NYSDOT, CTDOT, etc.
- Surveys/Investigation – Utilities, Bathymetry, Topographic, HTRW, Geotech
- Traffic Study – Including traffic flow analysis, accident prevention plan, signage
- Environmental consideration – Cultural & Historic Resources; ENV permits, etc.
- Hydrology and Hydraulics (H&H) Modeling
- Value Engineering (VE) Study - Week long review of design and cost study

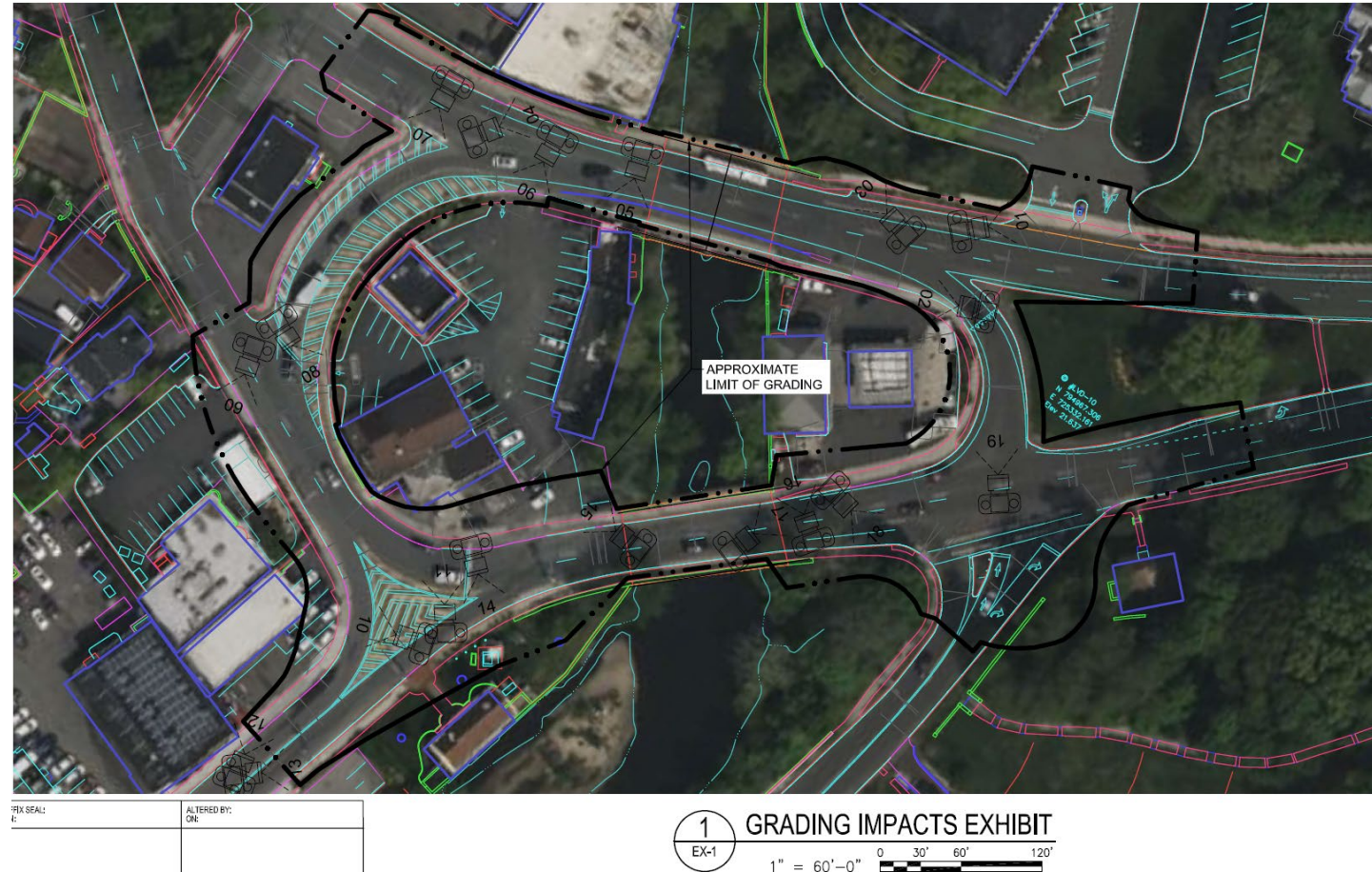


BYRAM RIVER FLOOD RISK MANAGEMENT CURRENT STATUS

10



- Data Collection Surveys (Topographic, Bathymetric, Channel cross-sections)
- Traffic Study Work Plan & Reviews
- CT and NY DOT Right of Way Permits for Geotechnical Investigations (CTDOT complete/NYSDOT pending)
- Geotech Investigation scope of work and borings plan
- Calibrated Hydrology and Hydraulics model to latest rain event and project extents
- Right of Entry's (ROEs) coordination is ongoing with public and private land-owners for Geotech investigation





BYRAM RIVER FLOOD RISK MANAGEMENT

WHAT'S NEXT



- Process survey results
- Traffic Study and Analysis Report
- Geotechnical investigations (pending NYSDOT permit and ROEs)
- Environmental resource investigations
- Update Hydrology and Hydraulics modeling based on survey results
- Finalize bridge design
- Coordination with environmental regulatory agencies (NYSDEC & CT DEEP) and permit acquisition
- Engage property owners for temporary & permanent easements
- Coordination with NYSDOT, CTDOT and ToG for execution of the Project Partnership Agreement (PPA) to start Construction Phase.
- Award a single construction contract for both bridges



BYRAM RIVER ENGINEERING DESIGN SCHEDULE



Design Major Milestones	Date
Design Agreement Executed	18 April 2023
Design Contracted to AECOM	February 2024
Bridge Design Contract Awarded	21 November 2024
30% Design + Reviews	July 2025
60% Design + Reviews	October 2025
90% Design + Reviews	February 2026
100% Design + Reviews	April 2026
Backcheck Reviews	May 2026
P&S Approval (Design Acceptance)	June 2026
Project Partnership Agreement (PPA)	September 2026
Start of Construction Phase	October 2026*
Physical Construction Starts	Spring/Summer 2027

* Start of the Real Estate acquisition process



BYRAM RIVER FLOOD RISK MANAGEMENT

KEY POINTS



No flood risk management project can eliminate the risk of flooding.

Flood risk management reduces the frequency and/or severity of flooding and provides additional time to respond.

Communication of accurate and timely information about the risk of living in a flood prone area is critical and best implemented at the local level.

Flood risk reduction is a shared responsibility, and a collaborative approach is required to effectively manage the risk of flooding and save lives (USACE, FEMA, State, County, Local Gov., Emergency Personnel, Residents).

- Insurance
- Zoning
- Emergency Action Plan (EAP)
- Communication



BYRAM RIVER FLOOD RISK MANAGEMENT

14



Questions?



BYRAM RIVER FLOOD RISK MANAGEMENT PROJECT CONTACT



Rifat Salim

Project Manager

U.S. Army Corps of Engineers, New York District

917-790-8215

Rifat.salim@usace.army.mil

Project Email Address:

byram.river@usace.army.mil