October 14, 2025

Mr. James F. Ventres, Land Use Administrator
Inland Wetlands and Watercourses Commission - Land Use Office
Town of East Haddam
1 Plains Road P.O. Box 385
Moodus, CT 06469

Sent Via: Hand Delivered

RE: Replacement of Bridge No. 040025
AP Gates Road over Unnamed Brook
East Haddam, CT
NLJA #0959-0012

Dear Mr. Ventres:

We are pleased to submit the following documents to the East Haddam Inland Wetland and Watercourses Commission for regulated activities associated with the above project:

1. One (1) copy of an executed *East Haddam Inland Wetlands and Watercourses Commission Application Form.*
2. One (1) executed *CTDEEP Statewide Inland Wetlands & Watercourses Activity Reporting Form*.
3. Two (2) sets of final design drawings, sized 24" x 36", dated October 2025.
4. Six (6) sets of final design drawings, sized 11" x 17", dated October 2025.
5. One (1) list of names and mailing addresses of four adjacent landowners.

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Nathan L. Jacobson & Associates, Inc.
Nathan L. Jacobson & Associates, P.C. (NY)
86 Main Street P.O. Box 337 Chester, Connecticut 06412-0337
Tel 860.526.9591 Fax 860.526.5416
Consulting Civil and Environmental Engineers Since 1972

The existing culvert carries AP Gates Road, a bi-directional paved road, over an Unnamed Brook in a generally north-south direction. The Unnamed Brook flows east to west at this location, approximately 1,800 feet south of the intersection of AP Gates Road and Warner Road. The existing structure consists of twin 3' diameter corrugated metal pipe barrels with concrete masonry unit headwalls, wingwalls and metal beam guide rail. The length of structure, in the direction of water flow, is approximately 30.5'. The road width over the structure is approximately 20'.

Barrel invert section loss is 100% and deformation exists at the inlet. The roadway has been hydrologically overtopped in the past. The existing culvert is structurally deficient, hydraulically inadequate, and functionally obsolete. The Town has secured a grant from the CTDOT State Local Bridge Program to help fund replacement of the culvert.

It is proposed to remove the existing pipes and to install a 12' wide x 5' high precast concrete box culvert barrel with reinforced concrete wingwalls and parapets, two catch basins, a storm sewer manhole, bituminous concrete lip curbing, and metal beam guiderail. The proposed road width will be 24'. The barrel floor will be backfilled with 6"-12" natural brook bottom material for fish passage. Proposed plants and fully chinked riprap with wetland seed mix are included. Proposed riprap will be placed above the plane of ordinary high water; riprap will not be placed "in the brook". The proposed channel gradient will essentially match existing. The culvert barrel roof will be protected with a membrane waterproofing system. The back of vertical walls will be protected with dampproofing. The roadway will be paved with hot mix asphalt. A metal beam guiderail meeting current design standards will be installed on both sides of the road for a roadside barrier. The culvert hydraulic design complies with the CTDOT Drainage Manual 2000. The Town is planning to construct in 2026 and is actively pursuing a permit from the U.S. Army Corps of Engineers and the CTDEEP for 401 Water Quality Certification.

During construction, a temporary hydraulic bypass pipe system will be installed along with cofferdams to enable construction in the dry. A temporary dewatering basin will be set-up to handle pump discharge from the cofferdams. Erosion and sedimentation controls will be installed and maintained by the contractor until final site restoration is complete. Erosion and sedimentation controls include, but are not limited to: erosion control blankets, sedimentation fences, and a designated pump discharge area.

Please place this project on the Commission's next meeting agenda. In that this is a municipal project, we respectfully request that the permit fee be waived.

Please contact us with any questions.

Very truly yours,

NATHAN L. JACOBSON & ASSOCIATES, INC.

Herny J. Almonte Fernandez, E.I.T.

Encl.

Cc: J. Howard Pfrommer, P.E., w/ encl.
File, w/ encl.

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