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. 040026
Beebe Road over Pine Brook
East Haddam, CT
NLJA #0959-0014

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 permitting drawings, sized 24" x 36", dated October 2025.
4. Six (6) sets of permitting 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 Beebe Road, a bi-directional unpaved road, over Pine Brook in a generally west-east direction. Pine Brook flows north to south at this location, approximately 1 mile southeast of the intersection of Beebe Road and East Haddam Colchester Turnpike. The existing structure has a reputed 6' diameter corrugated metal pipe barrel with gravel road surface. The length of structure, in the direction of water flow, is approximately 32'. The road width over the structure is approximately 19'.

The average water surface elevation is close to the elevation of the roadway in normal conditions. It appears the barrel has been compressed and partially blocked over time. 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 the replacement of the culvert.

It is proposed to remove the existing pipe and to install a 14' wide x 6.5' high precast concrete box culvert barrel with concrete wingwalls and parapets, riprap slope protection, and Merritt Parkway guiderail. The proposed road width will be approximately 16' to 20' to match existing conditions and meet funding agency requirements. The barrel floor will be backfilled with 12" of natural brook bottom material for fish passage. The roadway will be restored to current horizontal and vertical geometry. The proposed riprap will be placed from within a cofferdam. 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. A metal beam rail meeting current design standards will be installed on both sides of the road for a roadside barrier. It is proposed to install one information sign on both sides of the road and relocate one existing sign. 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 a sheet pile cofferdam to enable construction in the dry. A temporary dewatering basin will be set-up to handle pump discharge from the cofferdam. Erosion and sedimentation controls will be installed and maintained by the contractor until final site restoration is complete, including: containment booms, 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: Joshua R. Eannotti, P.E., w/ encl.
J. Howard Pfrommer, P.E., w/ encl.
File, w/ encl.

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