



GEODesign, Inc.
984 Southford Rd.
Middlebury, CT 06762
(203) 758-8836

MEMORANDUM

TO: **CT DEEP Dam Safety Program**
Charles Lee – charles.lee@ct.gov
Anna Laskin – anna.laskin@ct.gov
Kathryn Malinowski – kathryn.malinowski@ct.gov
Akhila Mirza – akhila.mirza@ct.gov;

Cc: **Wright Investors' Service Holdings Inc.**
(Harold Kahn – hkahn@wisholdings.com)

FROM: **GEODesign Inc.**
(Jacob Wimett, P.E., Principal – jwimett@geocompanies.com)
(Ulrich LaFosse, Sr. Consultant – ulrichfa@gmail.com)

DATE: **January 5, 2025**

RE: **Killingly Pond Dam (CT Dam ID #6912) Plan of Action
Response to NOV DS-2025-1060V
Killingly, CT**

FILE NO.: **3200-001.06**

On behalf of Wright Investors' Service Holdings, Inc. (WISH), GEODesign, Inc. (GEODesign) provides this memorandum in response to the Notice of Violation (NOV) issued on November 6, 2025, regarding Killingly Pond Dam (ID #6912). The NOV required a plan to be submitted to the Connecticut Department of Energy and Environmental Protection (DEEP) to place the dam in a safe condition. This memorandum outlines the proposed plan to do so.

BACKGROUND

In September 2025, DEEP asked WISH to investigate reports of seepage at the base of the dam. In response, a monitoring program was started to measure and observe seepage from two spots at the bottom of the dam. These efforts were performed by GEODesign at the request of WISH and were described in our updates to DEEP dated September 18 and October 6, 2025.

During routine monitoring on October 24 and 25, 2025, WISH staff observed that the seepage was carrying sediment. This can be a warning sign indicating that water is eroding material from inside the dam or its foundation. On October 26, 2025, GEODesign, on behalf of WISH, recommended taking immediate public safety precautions, including activating the dam's Emergency Action Plan and opening the Low-Level Outlet (LLO) to lower the water level in Killingly Pond to reduce pressure on the dam.

DEEP's Dam Safety Program was kept informed throughout these events and issued Emergency Authorization No. DS-202508375-02EA, which allowed the pond to be lowered as a safety measure to reduce potential risk to the public and relieve stress on the dam. WISH has acted promptly throughout this process, has been proactive in monitoring the dam and has kept DEEP updated in this regard.

At the same time, DEEP issued Notice of Violation No. DS-2025-1060V requiring the following actions:

1. **Within 30 days:** Submit a Hydrologic and Hydraulic (H&H) analysis showing that during the drawdown, the LLO can safely handle a 100-year storm event without compromising the structural integrity of the dam.
2. **Within 60 days:** Submit a plan describing how the dam will be placed in a safe condition going forward.

We previously issued the results of the updated H&H analysis and our associated short-term recommendations in our Memorandum dated December 6, 2025. The purpose of this memorandum is to address the second requirement: providing a plan describing how the dam will be placed in a safe condition.

PLAN OF ACTION

Based on ongoing monitoring that began in October of 2025 of the two primary seeps on the downstream face, we observed that the upstream (pond-side) connections between the pond and the seeps occur at a level beneath the vertical portion of the upstream (pond-side) face of the dam. In particular, both of the seeps decrease sharply when water level drops below about El. 576', and to negligible levels (less than 50 gallons per minute) once the pond level is below about El. 575.5'.

As such, our recommended plan of action will be to modify the dam in a manner to permanently maintain a pool level at or below elevation 576.6' (i.e, the approximate water level above which seepage becomes a concern). We propose to accomplish this by (i) fully opening the LLO to allow the pond to drain to the lowest point of the outlet opening, and then (ii) removing the LLO gate from its operator stem so water can flow freely through the LLO channel. This approach has the following benefits:

- With the gate permanently removed, the normal pond level will be lowered to approximately El. 571'. The updated H&H analysis provided in our December 6 Memorandum has shown that starting from this pool level, the associated increase in pond level during the 100-year storm will be to about El. 576.6' - - very closely matching the level at which the downstream seepage was noted to rapidly decrease. We are confident in the dam's structural integrity with a maximum pond at or below Elevation 576.6'.

- Access from the road along the dam to the residences on the east side of the dam will not be affected by this plan. Other solutions would require closure of the road for indeterminate periods of time to complete subsurface explorations and eventual construction associated with more involved dam repairs or removal.
- This approach preserves future options. Unlike a formal breach, this solution allows for a possible future project to repair or rebuild the dam to a condition that can maintain the prior normal pool level of El. 586'. As has been previously communicated several times to both the Town of Killingly and DEEP, WISH is willing to transfer ownership of the dam to an interested party with a vested interest in maintaining the pond at its previous level.

This approach means that the Killingly Pond Dam will still remain a dam. in that it will retain water during the 100-year storm. As such, keeping a clear, unobstructed channel for the LLO will now be incorporated into the routine maintenance of the dam. It is understood that ongoing routine maintenance, inspections, and Emergency Action Plan updates will be required in accordance with DEEP Dam Safety criteria.

This plan provides a practical and effective way to reduce risk, protect public safety, and ensure the long-term stability of the Killingly Pond Dam. By permanently lowering the pond to a safer level and continuing regular monitoring and maintenance, WISH is taking responsible steps to address the observed conditions while preserving future options for the dam and pond.