Dam Site 2

Vitals

- Location: Western side of community; southwest of Weehawken Place
- Most-Likely Hazard Classification by the State: High Hazard (Due to a home and road being immediately downstream of the dam)
- Dam Height: 20-ft (Estimated)
- Dam Crest Width: 12-ft (Estimated)
- Dam Crest Length: 450-ft (Estimated)
- Normal Pool Depth (from Ryan Stanley, Foster Lake and Pond Management): 12-ft (Estimated)

Overall View of Dam

Overall Statement Regarding the Functional Conditions of the Dam and Outlet Works

This dam is in a state of significant disrepair. At one time, this dam included a functional stand pipe and piped spillway. At the inspection, both outlet works appeared to have been completely compromised. Approximately 20-ft downstream of the toe, a wet, mushy area (with wetland vegetation) was noted. This wet zone is, most likely, the result of seepage through the dam. Currently, the dam is served by one overland spillway that includes a riprap exit channel that crosses through the back yard of one home.

Elemental Inspection of Dam for General Maintenance Only

Routine maintenance items are indicated in red.

Dam Embankment

The upstream face and top of the dam are largely bare of vegetation. Routine Maintenance Item: Establish grass on these surfaces.

The downstream face of the dam is ignificantly overgrown. Routine Maintenance Item: Remove all trees (six inches in diameter or less) and all overgrowth.

Just downstream of the downstream toe of the dam, a wet zone exists. It is believed this zone is principally the result of seepage from under the dam. Routine Maintenance Item: Monitor (at the toe) the seepage for changes in the quantity of water, for changes to the wetland vegetation, and for the emergence of soil boils or active coffee-stained water at the toe. It is recommended also that the normal pool be monitored for significant (and/or rapid) drops in water surface.

Failed Outlet Works

As indicated above, the outlet works have failed. Routine Maintenance Item: Monitor these for changes in flow or condition.

Emergency Spillway

A fence currently blocks flow in the emergency spillway in two places. Routine Maintenance Item: Both fence locations should be modified to allow flow to pass unbstructed under the fence.

Suggested Rehabilitation Option

Rehabilitation Items

- Eliminate the failed outlet works (e.g., stand pipe and spillway pipe).
- Remove all woody vegetation from the dam.
- Install a new concrete riser and spillway system.
- Install an overland emergency spillway.

Order of Magnitude (OM) Construction Costs $900,000

OM Engineering, As-Builting, and Surveying Costs $120,000

OM Environmental Permitting Costs $5,000

OM Geotechnical Testing and Observation Costs $50,000

Construction Observation (Non-Geotech) Costs $50,000

OM Total Costs $1,125,000

Suggested Breaching Option

Breaching Items

- Breach dam.
- Stabilize (minimally/only as necessary) stream through impoundment.

Order of Magnitude (OM) Construction Costs $75,000

OM Engineering, As-Builting, and Surveying Costs $10,000

OM Environmental Permitting Costs $3,000

OM Geotechnical Testing and Observation Costs $0

Construction Observation (Non-Geotech) Costs $10,000

OM Total Costs $98,000