

Recommendation to the Durham Town Council on the Mill Pond Dam

Durham Historic District Commission/Heritage Commission January 7, 2021

During the January 7, 2021 meeting, the Durham Historic District Commission/Heritage Commission voted (6-0) on the following motion:

The Durham Historic District Commission/Heritage Commission recommends that the Town Council move forward with Mill Pond Dam Alternative # 3 - Dam Stabilization, as the alternative that will ensure its continued preservation.

Historical Preservation and Community

Historic preservation seeks to protect a 'sense of place' that is important to a community – special places that reflect unique human history over time.

Indeed, the Town of Durham has stated its commitment to historic preservation in its 2011 Master Plan where “historic resources, including archeological, architectural, **engineering**, and **cultural heritage**, are important assets in Durham that contribute to the character and quality of life in the town.” *The town preserves, protects, and celebrates these resources.....*

The Town’s 2011 Master Plan Survey further indicates 84% of citizens who completed the survey, “agree “or “strongly agree” that the Town should preserve historic structures in order to protect and promote historic and cultural character.

The Durham Historic District Commission/Heritage Commission (established in 1975, and 2006 respectively) is charged with administering Article XVII, the Durham Historic Overlay District of the Zoning Ordinance, by:

- Safeguarding and preserving structures, places, and properties that reflect elements of the cultural, social, economic, religious and political heritage of the Town.
- Fostering the preservation, restoration, and rehabilitation of structures and places of historical, architectural, and community value.
- Conserving and improving the value of property within the District (generating increased tax revenue).
- Protecting and enhancing the attractiveness of the District to the citizens as well as visitors, and thereby providing economic benefit to the Town.
- Fostering civic pride in the beauty and noble accomplishments of the past.

Clearly, the Mill Pond Dam meets all these criteria.

The Mill Pond Dam - Significant Locally, State-wide, and Nationally

The Mill Pond Dam, originally the Oyster River Dam, is an important and distinctive cultural resource that helps Durham residents better understand how those who came before us shaped their lives, and how the environment in which we live today, evolved. The loss of this significant historic resource would erode the authenticity of Durham’s man-built landscape and our connection to it. It would rob the town, the State of New Hampshire, and the nation of a rare resource.

The Dam, Waterfall, and Mill Pond – Evolution of the Rural Landscape

Indigenous peoples first occupied land along Little Bay, Great Bay and the Oyster River but an abundance of fish and timber drew European settlers in the 17th century. In 1649, Valentine Hill, (whose house has become incorporated into Three Chimney's Inn), was the first to be granted water rights to dam up the falls at Oyster River and build a sawmill. Over time a grist mill, tannery, blacksmith shop, shingle mill, and cider mill were added. As the economy prospered, the settlement grew. Shipbuilding, associated trades, and homes soon populated the waterfront near the Old Landing and throughout the 17th and 18th centuries this area was the focus of village life.

Lt. Col Adams and General John Sullivan, whose houses are across from the Mill Pond Dam, led the raid on Fort William and Mary (now **Fort Constitution**) in 1774 where British cannons and gunpowder were seized. The raid is now recognized as one of the first overt acts of the American Revolutionary War, and the only battle to take place in the state of New Hampshire.

Valentine Hill's sawmill needed a dam and mill pond to impound water to regulate flow to a water wheel to turn logs into lumber. This early use of water-powered technology on the Oyster River altered the landscape. Remnants of that altered landscape – the dam on the Oyster River (albeit a more modern version), the 18th century houses that survive clustered near the mill pond and Old Landing, and the spatial orientation of those houses to the waterfront – are visual reminders of our cultural heritage. Removing tangible evidence of that process of change – of the people who occupied, developed, used, and shaped the land to serve their human needs – seems short sighted. It diminishes a unique characteristic of Durham – that has survived from the Colonial times.

The Mill Pond Dam as Technological Marvel

The Mill Pond Dam is significant for its design and construction, embodying distinctive characteristics of the Ambursen dam type, with a concrete slab and buttress method of construction. This method of fabrication represents cutting edge technological advances in dam engineering of the early 1900s. Of New Hampshire's 5,000 dams, the Mill Pond Dam is the oldest of seven Ambursen-style dams known to exist in New Hampshire.

The engineer responsible for construction of the Mill Pond Dam was Charles Elbert Hewitt (1869-1934) of the New Hampshire College of Agriculture and the Mechanic Arts, now the University of New Hampshire. A native of New Hampshire, Hewitt graduated from New Hampshire College (then in Dartmouth) in 1893, and received a Master's Degree in Mechanical Engineering from Cornell in 1895. Hewitt moved to Durham and joined the New Hampshire College faculty as a professor and head of the electrical engineering department. In 1915, he was appointed Dean of the Engineering Division. The former Shop Buildings at UNH were named in honor of Professor Hewitt in 1942.

The contractor for the Mill Pond Dam was the D. Chesley Company of Durham. Daniel Chesley (1859-1953) was an experienced local contractor, stonemason, and successful farmer. Although he initially specialized in granite masonry, Chesley became adept in the use of concrete in the early 1900s. Listed in the town directories (beginning in 1898) as a stone contractor and stonemason, he advertised in 1905 as a stone contractor and builder with the granite quarry on the Dover-Durham Road (now site of Durham Public Works). Daniel Chesley was responsible for many of the structures built in town during the early 1900s.

Mill Pond Dam - Part of a Tradition of Philanthropy to the Town and the University by the Hamilton Smith Family

Mrs. Edith Angela Congreve Onderdonk built the new state of the art Mill Pond Dam in memory of her step-father Hamilton B. Smith who died in 1900.

When one of the old timber replacement dams at Mill Pond washed out in 1912, the pond drained, leaving a muddy swampy shore. The picturesque view overlooked by Red Tower (the Smiths' family home), and other Main Street houses, and the Congregational Church was lost, and the water level in the river upstream near Smith Chapel dropped. At a time when dam construction was not a municipal activity and the water power was of minimal use for local industry, Mrs. Onderdonk gave the funds for the dam in order to preserve the beauty of the Mill Pond in memory of her stepfather.

Hamilton B. Smith (1840-1900) was born and raised outside of Louisville, Kentucky, near his father's coal mines in Cannelton, Indiana. He spent time with his grandparents in Durham (18 Main) in the 1850s. Self-taught as an engineer, Hamilton Smith became an expert on hydraulic mining. From California gold mining in the 1870s, he worked for the Rothschilds in Venezuela and then formed his own South African gold and diamond mining firm based in London. Smith was involved in underground railway construction in London and Paris and invested in Alaskan mining. Hamilton Smith and Alice Robinson Jennings Congreve (Edith's mother) were married in London in 1886.

Hamilton Smith enjoyed his home in Durham, the iconic Red Tower at the top of Church Hill, only a few years. He died suddenly in 1900 in a boating accident on the Oyster River, just before his sixtieth birthday. He is buried near the river and his widow Alice Hamilton Smith erected the stone Smith Chapel in his memory.

The Smiths were philanthropic supporters of the new local college. In 1897, a donation of \$10,000 established the Valentine Smith scholarship for non-resident students. Later, Smith's will bequeathed \$10,000 for construction of a public library in Durham, and was used to build Hamilton Smith Library (now Hamilton Smith Hall) jointly with the College and Andrew Carnegie in 1907.

Eventually, the Smith Estate would be divided between Dartmouth College and New Hampshire College (UNH). While Edith Onderdonk built the Mill Pond Dam as a memorial to her step-father in 1913, she gave \$16,000 to New Hampshire College for construction of a women's dormitory in memory of her mother. With an additional \$10,000 from the State, Smith Hall was built in 1908.

Summary

The period of significance for the Durham Historic District spans from the 1600s to after 1900. In the heart of the Durham Historic District, the Mill Pond Dam remains a highly visible connection to our past. It represents the continuum of time between our earliest village center and our modern landscape.

The waterfall at Mill Pond Dam remains one of the most iconic images in Durham. While conservation issues are important to us all, there are numerous examples of successful collaborations between conservation and historical commissions. The goals of historic preservation need not be sacrificed to optimize the environmental benefit at Mill Pond. Nor should our history be sacrificed in exchange for

an unwillingness to expend financial resources. The life and the work of Durham residents who came before us must not be diminished by the removal of a most precious legacy. The Historic District Commission/Heritage Commission respectfully requests that the Town Council vote to enact Option #3 Stabilization of the Mill Pond Dam.