



Society for Industrial Archeology · New England Chapters

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NORTHERN CHAPTER OFFICERS

David Dunning, President
Ray Breslin, First Vice President
David Coughlin, Second Vice President
Dennis Howe, Secretary
Richard Coughlin, Treasurer

SOUTHERN CHAPTER OFFICERS

President (vacant)
Vice President (vacant)
Leonard Henkin, Secretary
Sara E. Wermiel, Treasurer
Committee-of-the-whole management committee:
Betsey Dyer, Leonard Henkin,
Ron Kodenski, and Sara Wermiel

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See New England Chapters of the Society for Industrial Archeology on the Web at <http://nec-sia.org> to obtain more information and membership details.

NNEC-SIA President's Report

Thank you to those loyal members who chipped in financially to keep us afloat last year. It allowed us to continue printing our newsletter. Now we need others; \$25, \$50 or \$100+ will enable us to continue providing what you enjoy from our SIA chapter. Life members can occasionally pay dues just to help? Thanks again, from all of us.

The Annual Winter Conference, that was postponed due to the pandemic, will be rescheduled for a later time.

David Dunning, President

Treasurer Report - Fall 2020

Bank Balance on August 31, 2020: \$4,302

Bank Balance on August 31, 2019: \$4,292

Thus the bank balance has increased \$10 in the past year!

2020 Annual Paid Membership on September 15 is 28.

Life Members: Estimated at 30.

Annual Paid Membership was down about 20% from the past two years. This is likely due to the cancellation of the Plymouth Conference and the Spring Tour. At these events, several members pay their annual membership dues and others may join the NNEC-SIA.

Submitted on September 15, 2020 by:
Rick Coughlin, Treasurer, NNEC-SIA

NNEC Life Members Email Addresses Needed

To update our email list, please send your current email address to

RCoughlin@myfairpoint.net

and keep it current. If you do not have email, then please call Rick Coughlin at 207-384-2645 so we'll have your phone number if an event or tour is cancelled.

Report of the Treasurer and Management Committee of SNEC: SNEC in Corona Virus Days

Life has certainly changed a lot in the SNEC region since early March, when COVID-19 hit Massachusetts hard. Following a February Biogen company conference, attendees clamored for virus tests at Massachusetts General Hospital, around the time I had an appointment there. When I went to unlock my bicycle to return home after my visit, a woman in scrubs, who also had locked her bike at the rack, stood some feet away from me and waited until I left. What gives, I wondered. Today, such standoffish behavior is not only appropriate but necessary. We all have had to get used to new practices and norms. Meanwhile, people have gotten sick and passed away. Work is disrupted, supply chains disrupted, business disrupted, people have lost jobs and hours of work, among other new conditions of life.

And of course, the pandemic has affected SNEC's activities. The chapter cannot offer tours or programs that involve bringing people physically together.

The SNEC Management Committee has tried to find projects for the chapter, especially ones that can be done from home, physically distanced. Thus, in July we launched the Industrial Heritage Sites in the Southern New England Region project (<http://nec-sia.org/pdf/Heritage%20List%20Info.pdf>). The purpose is to put together a list of, preferably lesser-known industrial heritage sites in the region. This would add to the list of sites already identified on the NEC website (<http://nec-sia.org/resources.htm>). The idea is to bring local and favorite IA sites to the attention of members, who can visit them on their own.

So far, we have received four nominations:

- Danbury Rail Museum
- New Bedford Fisheries
- Gilbert Stewart Museum
- Hamel Leather/Burgess Building

We urge members to send in more suggestions. We will compile a list for the NEC website. You can get the link to the information sheet and download the nomination form using links under "Announcements" on the NEC website homepage <http://nec-sia.org/index.htm>

In addition, Renée Tribert, of Preservation Connecticut, called our attention to that organization's excellent "Mills: Making Places of Connecticut" website, which was added to the NEC IA resources webpage.

Normally, this fall, SNEC would be planning for the

spring New England IA conference. But since the 2020 conference was canceled, NNEC will host the conference in 2021.

Autumn also is when nominations for SNEC officers are supposed to be received and an election is supposed to be held, at an annual meeting. Currently, the chapter has two officers: Sara Wermiel, Treasurer/registrar and Leonard Henkin, Secretary. If anyone would like to run for any chapter office – President, Vice-President, Treasurer/registrar, Secretary – please contact Sara Wermiel at swermiel@verizon.net, sending along your background and a statement of interest. Leonard and I are willing to continue in our offices for 2021. If there are nominations, I'll organize a Zoom annual meeting and election.

Because no one offered to serve as President or Vice-President for the current year, a management committee was formed to work on activities and projects for the chapter (ordinarily the responsibility of the President and Vice-President). Volunteers were sought to serve on the committee. In 2020, Betsey Dyer, Leonard Henkin, Ron Klodenski, Robert Timmerman, and Sara Wermiel served on the committee. The committee will continue in 2021 unless a President is elected for the chapter. All current committee members have agreed to continue to serve.

Meanwhile, the chapter's treasury is in good shape, with a balance of over \$11,000. I will report on chapter finances for 2020 in the spring 2021 newsletter. The number of members remains stable, at about 128 members.

SNEC continues because of volunteer efforts. If you would like to help in some way, or host a project for the chapter, please contact Betsey Dyer bdyer@wheaton-ma.edu with your ideas.

Sara E. Wermiel,
Treasurer/registrar, SNEC-SIA
October 2020

Middlesex Canal Association

The fall meeting of the Middlesex Canal Association will be held on October 25, 2020 at 1:00 P.M. at the Middlesex Canal Museum and Visitors' Center at 71 Faulkner Street in North Billerica. Because of the COVID-19 pandemic, please consult the MCA website, www.middlesexcanal.org, for current information concerning this meeting.

Smaller Historical Industries Near the Big Ones

Many SIA tours focus on big companies. There is sometimes not enough time to learn about the smaller entrepreneurial companies in the same town or city. SIA members can easily explore them on-line. Just type in “industrial history of _____”. Then enter the town or city. It’s surprising how much information is right there. Then, one can enter the names of specific companies found and learn about each one. For instance, the 2015 Fall NNEC Tour in Nashua, NH, focused mostly on The Nashua Manufacturing Co. which made textile products. The following other companies were making products in Nashua in 1936:

- American Box and Lumber Company
- American Shear Manufacturing Company
- Edwin E. Bartlell Company (now Greenard Press) still makes hydraulic presses
- Bundy Steam Traps
- Greg & Sons
- Anton J. Haug
- Nahua Paper Box Co. became International Paper Box Machine Co. (IPBM)
- International Shoe Company
- Lasell Shoe Company
- Nashua Art & Bronze Foundry
- Nashua Brass (saddlery)
- Nashua Foundry (still active)
- Nashua Steam Press & Boiler Works
- Old Colonial Furniture Company
- Proctor Company
- Rollins Engine Company
- White Mountain Freezer Company
- Bates Machine Company (see below)

**Inventions:
between 1881 and 1936,
174 patents were awarded to Nashua
inventors.**

Some of these companies produced products that were sold to consumers but most were sold to other companies. With northern New England’s Yankee Ingenuity, many industrial production machines were designed and built specifically for certain industries. Those included textiles, paper (and printing), leather and other footwear, firearms, machine tools, farm products, and food producing. Many New England foundries produced casting for these machinery companies and many small machine shops made parts for them.

Bates Machine Company, formed in 1896, made machinery for the paper industry. In 1901, it became Improved Paper Machinery Company (IMPCO). IMPCO once employed 1,350 people in Nashua at its plant on Burke Street, manufacturing pulp and paper mill machines and parts. It was sold in 1930 to a group of businessmen, again in 1964 to Ingersoll-Rand, where it reached its peak, then to Beloit Group in 1996 and finally to GL&V Pulp Group in 2000, eventually ceasing operations in 2002.

David Dunning
NNEC President

Video Taping of Tours?

Several members have asked if we could video/audio tape the tours as they either can’t get away then or the tours are too far away. Would someone, from either chapter, be willing to do that? The right person would likely enjoy it. The whole day wouldn’t be recorded, but still-shots included with the video and all of the oral presentations. The person would have to have their own recording device. However, the two chapters would perhaps agree to chip in on a tri-po and extra battery packs. When the tour was written up for the next newsletter, there could be a live link for digital readers to click on. Also, the link could be in the website. Please respond to David Dunning 603-526-6939 or email dunmark@tds.net. Responses are needed from both potential users of the equipment and from SIA officers who may see problems with this. Thank you.

David Dunning



Improved Paper Machinery Company – Manufacturing

Stone Arch Dike over Greenwich Creek

This stone arch dike is one of two intact single span stone arch dikes believed to be a part of a nineteenth century mill complex, located in the Town of Greenwich, Connecticut. As stated in the Connecticut Historic Bridge Inventory, “Bridges can inform us about the aesthetic ideas then current. As components of historic landscapes, old bridges can inform us about how those people lived their lives.”

The stone arch dike is constructed of uncoursed, dry-laid, rounded stones. The approach footpaths to the arch are supported by stone masonry walls that are built into the slope on either side of the creek. The surface of the structure is relatively flat and is made of stone with a thin layer of concrete coping. Measured from end-to-end, the dike is approximately 30-feet long and 3.5-feet wide. The span of the arch over Greenwich Creek is constructed of twenty-five voussoirs and is approximately 10-feet wide (measured from its springline). The structure’s height is approximately 8-feet, as measured from the water surface elevation to the top of the structure. In order to use or observe the stone arch dike at close range, one would have to be on private property.

Background research was conducted as part of a Phase 1 Archeological Reconnaissance Survey Report prepared by BL Companies dated June 29, 2015. The report involved the consultation of historic maps and atlases, aerial photography, soil maps, resident interviews, the files of the Greenwich Historical Society, files of the State Historic Preservation Office and visual inspection. The complete history of the stone arch dike is unknown. Historic documents and maps suggest that the area surrounding the site was developed



Figure 1. *Upstream fascia of stone arch dike along Greenwich Creek.*



Figure 2. *Downstream fascia of stone arch dike along Greenwich*

with residential properties since at least 1868, and possibly as early as 1773.

Within the area was a mill that was positioned near a pond to the northwest of the arch. Although the mill no longer exists, the stone arch dike is believed to be a part of this nineteenth century mill complex and represents an important element of Greenwich’s early industrial history.



Figure 3. *Top view of stone arch dike along Greenwich Creek from west approach.*



Figure 4. *Top view of stone arch dike along Greenwich Creek from east approach.*

The stone arch dike possesses local significance as a reflection upon the materials, design and construction method available to its builder. The stone arch dike does not appear to hold significance for the larger community, town or state, as it lies on private grounds, and is situated within a mature vegetative setting. It does not appear to be, or have been, a focal point or important landscape architectural element within the community. The stone arch dike is considered to be eligible for the National Register of Historic Places under Criterion C as an example of masonry arch construction.

Today, the stone arch dike along Greenwich Creek primarily sees use as a foot passage by property owners between segments of their privately-owned land. Occasionally, students from Greenwich High School utilize the stone arch dike as a “shortcut”. This, however, is simply for convenience and is not a necessity as adequate sidewalks exist along U.S. Route 1 (East Putnam Avenue).

Stone Arch Dike over West Brothers Brook

Located approximately 35-feet west of the stone arch dike over Greenwich Creek, a similar stone arch dike spans West Brothers Brook. A narrow dirt path connects the stone arch dikes, further facilitating their use as a foot passage. With similar materials, design features, and aesthetic attributes as the stone arch dike over Greenwich Creek, the stone arch dike over West Brothers Brook is also believed to be part of the same mill complex.



Figure 5. *Stone arch dike features, including voussoirs (left) and uncoursed, dry-laid, rounded stones supported by stone masonry walls (right).*

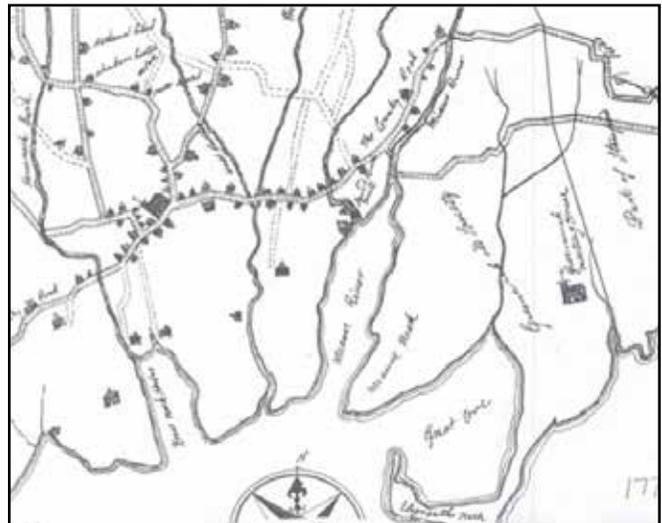


Figure 6. *Historic map identifying residential development in Greenwich, dated 1773.*



Figure 7. Historic map identifying the location of the nineteenth century mill complex, dated 1868.



Figure 8. View of stone arch dike along Greenwich Creek from U.S. Route 1.



Figure 9. View of stone arch dikes from convergence of West Brother's Brook (left) and Greenwich Creek (right).

Reason for Documentation

The Connecticut State Department of Transportation (CTDOT) is proposing to demolish and replace a structurally deficient, hydraulically inadequate and functionally obsolete bridge, carrying U.S. Route 1 (East Putnam Avenue) over Greenwich Creek, Bridge No. 01872. The existing bridge is located between Hillside Road and

Woodside Drive. Approximately 300-feet downstream of Bridge No. 01872, Greenwich Creek flows beneath the stone arch dike.

The State of Connecticut and Town of Greenwich investigated the hydraulics of Greenwich Creek and conclude the span needs to be increased, roadway elevation needs to be raised and the stone arch dike over Greenwich Creek needs to



Figure 10. Downstream fascia of stone arch dike along West Brothers Brook.



Figure 11. Path connecting stone arch dikes.

be removed to allow the design storm to pass Bridge No. 01872. Supporting these studies, in 2007 U.S. Route 1 was over-topped by Greenwich Creek, impacting its viability as an emergency route and the use of Greenwich High School as one of the Town's designated emergency shelters. The proposed replacement bridge will increase the clear span from 13.5-feet to 38.0-feet and raise the vertical alignment of U.S. Route 1 approximately 3-feet to allow for the passage of the 100-year design storm event.

As the stone arch dike will be removed to improve the hydraulics as part of this project and has been

found to be eligible for the National Register of Historic Places, the impacts to this resource are unavoidable, and the State Historic Preservation Office has requested that the dike be documented prior to any construction work. The State of Connecticut and the Town of Greenwich do not intend to remove the stone arch dike over West Brothers Brook. This structure will remain and represent Greenwich's early industrial history in this location.

Thomas J. Beckman, PE, LSI
BL Compani



Figure 12. Location Map.



Figure 13. U.S. Route 1, March 2007.

Wharves as Landscape

On the wharf, within the littoral zone, how did operations and spatial relationships create value in industrial and increasingly post-industrial conditions? Fisheries and marine commerce build a cultural landscape and the community's sense of place. I probe the physical reality of harborside structure, its relationships to the town, its formal and symbolic language, the portals and boundaries both welcoming and forbidding. Over time, the wharf's relation to water may change: here, Marson's Grain and Flour Warehouse of the 1930s is in 2020 the mostly landlocked Chowder House restaurant, with substantial water frontage now dedicated to parking. In the 1960s the owner of a potentially valuable parcel at the shallow head of this cove proposed dredging a channel and, with the spoil as base, building parking along the shore between it and the bulkhead. The dredging did not happen, but the parking did.



This line drawing is taken from a Sanborn skeletal leaf of a section of Boothbay Harbor, issued in 1931. The original atlas sheets are housed in the Boothbay Region Historical Society.

William Keller



This same area as it appears in September 2020.