



Friends of the Old Croton Aqueduct

Newsletter
No. 44, Summer 2013

Architect Donates Historic Survey Records

Robert Kornfeld, Jr.

Roz Li, founding Principal of Li Saltzman Architects, has donated her historic files from the 1975 HAER survey of the Old Croton Aqueduct to the Friends of the Old Croton Aqueduct. Ms. Li was the Project Co-Supervisor for the survey, as well as the only woman on the team. The files include photographs, notes and annotated maps. As part of the Friends' archive, the donated material will be kept in the Keeper's House, one of the historic structures studied in the survey. The Friends are most grateful to Ms. Li for this generous gift, which puts a human face on the work done by that first generation of preservationists, researchers and architects that began the decades-long process of documenting and interpreting New York City's historic waterworks.

The Old Croton Aqueduct had ceased being a water supply facility for some years when, in 1968, New York State acquired the portion north of the New York City line from the city. It was listed on the National Register of Historic Places in 1974. As part of the National Park Service's long-term efforts to document the nation's historic civil engineering and industrial heritage, a Historic American Engineering Record (HAER) team was assembled in 1975 to survey the Old Croton Aqueduct. Their documentation was produced under the general supervision of Douglas L. Griffin, Chief of HAER, and Eric Delony, HAER Project Director, in cooperation with New York State Office of Parks and Recreation.

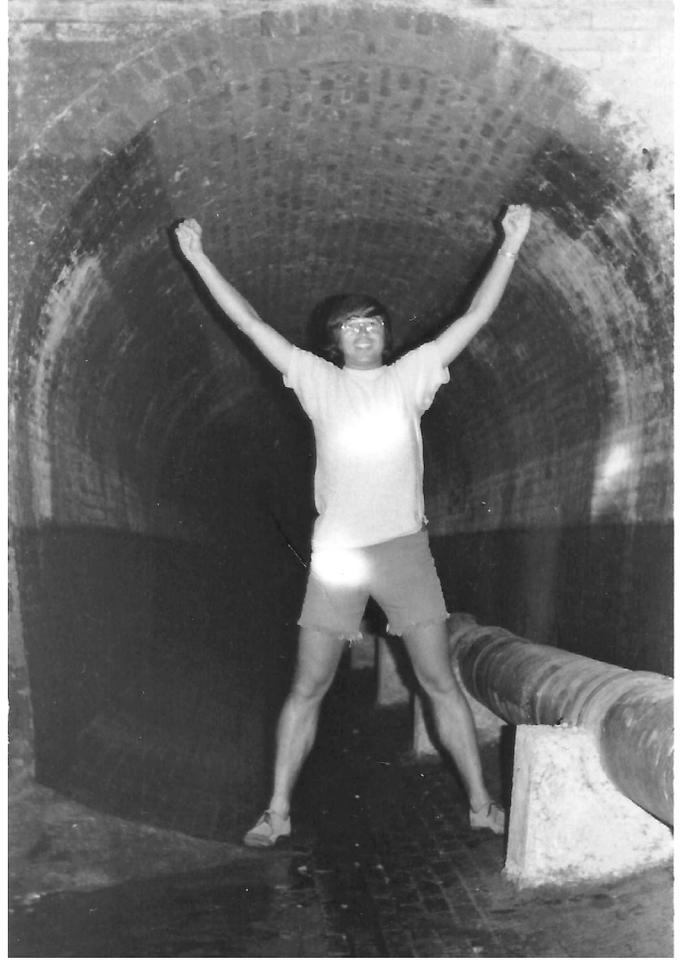


Roz Li and Robert Kornfeld, May 2013

In addition to Ms. Li, the survey team consisted of Robert Meden, Project Co-supervisor; Larry D. Lankton, Project Historian; Mark R. Edwards, Assistant Historian; Paul Aferiat, Architect; and Peter D. Basmajian, Architect. Jack E. Boucher was responsible for the formal photography. The team was headquartered at Briarcliff College in Briarcliff Manor, at HAER's temporary field office.

The team left a public record of measured drawings and photo recordation that is the baseline documentation of the Aqueduct to this day. The material donated by Ms. Li shows the more informal side of the documentation. There are maps with field notes and snapshots showing the survey team in action, investigating culverts and ventilators. One shows a team member standing inside the Aqueduct conduit in Da Vinci's Vitruvian Man posture.

In the years following the HAER survey, Ms. Li went on to found Li Saltzman Architects (LSA) with her partner, Judith Saltzman, a firm highly reputed for its preservation architecture. Ms. Li recently retired, which was the reason that she located the HAER documents as she organized her



HAER team member, Robert Meden, standing inside the Aqueduct conduit



The team surveying Ventilator #9 at Spring Street and Evert Avenue, Ossining

papers. LSA are currently the historic preservation architects on the design team responsible for the restoration of the High Bridge.

Another alumnus of the HAER team who had an impact on Croton Aqueduct history is Larry D. Lankton, the HAER historian whose study of Chief Engineer John B. Jervis became a doctoral dissertation, and who wrote an essay, *The "Practicable" Engineer: John B. Jervis and the Old Croton Aqueduct*, published in September 1977 by the Public Works Historical Society. His brilliant portrait of Jervis, combined with a harsh assessment of the previous Chief Engineer, David B. Douglass, defined the respective roles of the two engineers in the design and construction of the Croton Aqueduct for a generation.

Aqueduct Views of Palisades at Risk

Charlotte Fahn

One of the joys of walking on the Aqueduct in Hastings and parts of Yonkers is the magnificent view of the Palisades, unspoiled by commercial development because the height of buildings has remained below the tree line. This will almost certainly change if a project directly across the Hudson River from the Cloisters is allowed to go forward.

LG Electronics USA has received approval from the Borough of Englewood Cliffs in New Jersey for a 143-foot-high glass tower as part of its new headquarters complex. As a result of questionable zoning changes by the town, the building, sited on a 27-acre parcel of land at the western edge of Palisades Interstate Park, would be much taller than the trees in the park and therefore conspicuous from northwest Manhattan and Riverdale (including Wave Hill). Until now, new buildings have stayed within a 35-foot height limit.

It is likely that if Englewood Cliffs proceeds with such an action, other New Jersey towns to the north will quickly follow suit, leading to a scattershot line of tall commercial buildings probably visible from Yonkers, Hastings, and other river towns.

The LG site is large; the company could redesign the building to be horizontal rather than vertical, with no loss of jobs or tax revenue. Opponents of LG's plan are challenging it

in court and, with other organizations, have formed the Protect the Palisades coalition to mount a public campaign for a redesign – visit www.protectthepalisades.org to learn more. (Click on “About Us: Endorsements” to read a letter from Hastings Mayor Peter Swiderski.) Important support came most recently in a joint letter to LG from four former governors of New Jersey. Governors Byrne, Kean, Florio, and Whitman stress the disruption of present views “enjoyed by millions” and the precedent LG would set “for greater building heights stretching northward along these iconic cliffs . . . “

There is nothing in this country quite like the Palisades in their majestic sweep north of the George Washington Bridge. They are a National Historic Landmark, a National Natural Landmark, and have a long human history. The cliffs were saved by others from destruction by quarrying a century ago – their beauty is now ours to preserve.

Let your opposition be known. Write to LG's CEO, Mr. Wayne Park, at 1000 Sylvan Ave., Englewood Cliffs, NJ 07632, and copy your elected representatives. *It is especially important that New Jerseyans write to LG and copy, call, or write to Gov. Chris Christie:* State House, Trenton, NJ 08625, tel. 609-292-6000, fax 609-292-5212. See “Take Action” at www.protectthepalisades.org. Spread the word!

The Palisades from the Aqueduct in Hastings (Photo by C. Fahn)



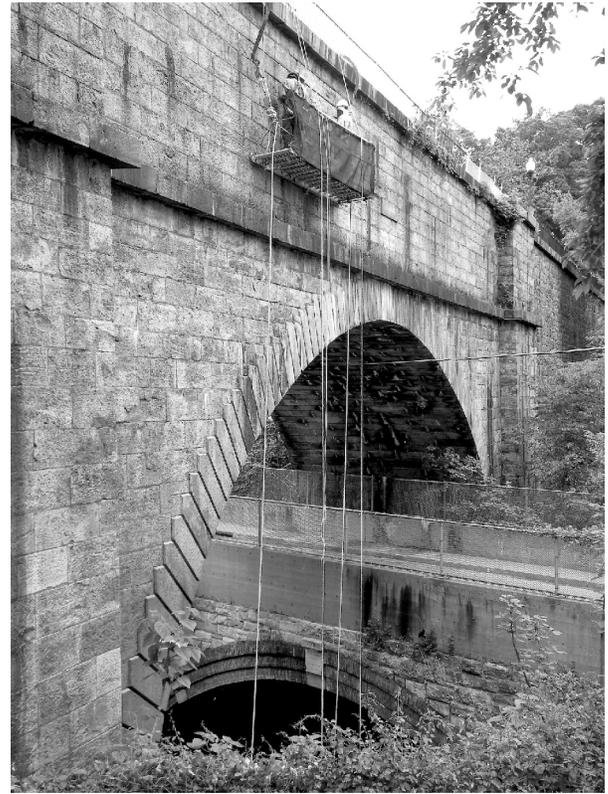
Restoration of Ossining Double Arch Bridge and Weir Building

Tom Tarnowsky



Site supervisor, Roger Moore, directing the installation of a new drainage pipe system for the top of the bridge.

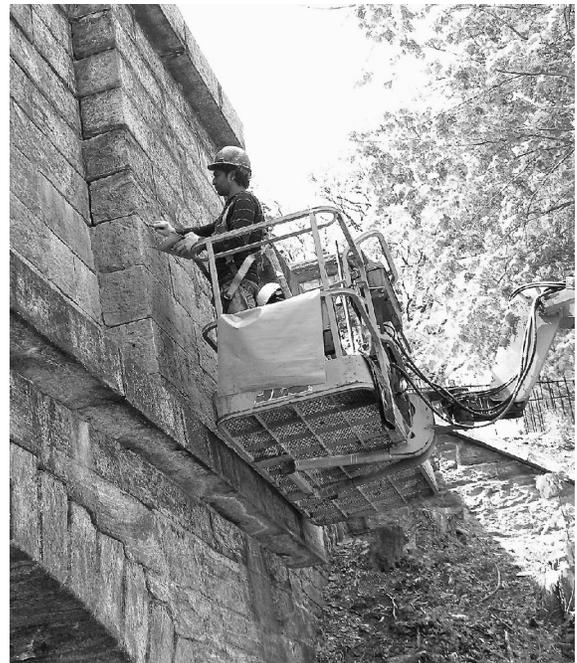
This year saw the start of a long-planned project to refurbish the Aqueduct Double Arch Bridge and weir in Ossining and all the ventilators. This project is funded and administered by the state Office of Parks, Recreation and Historic Preservation. The restoration of the weir and bridge began while there was still snow on the ground in early Spring 2013. Early stages removed all the old concrete paving on the



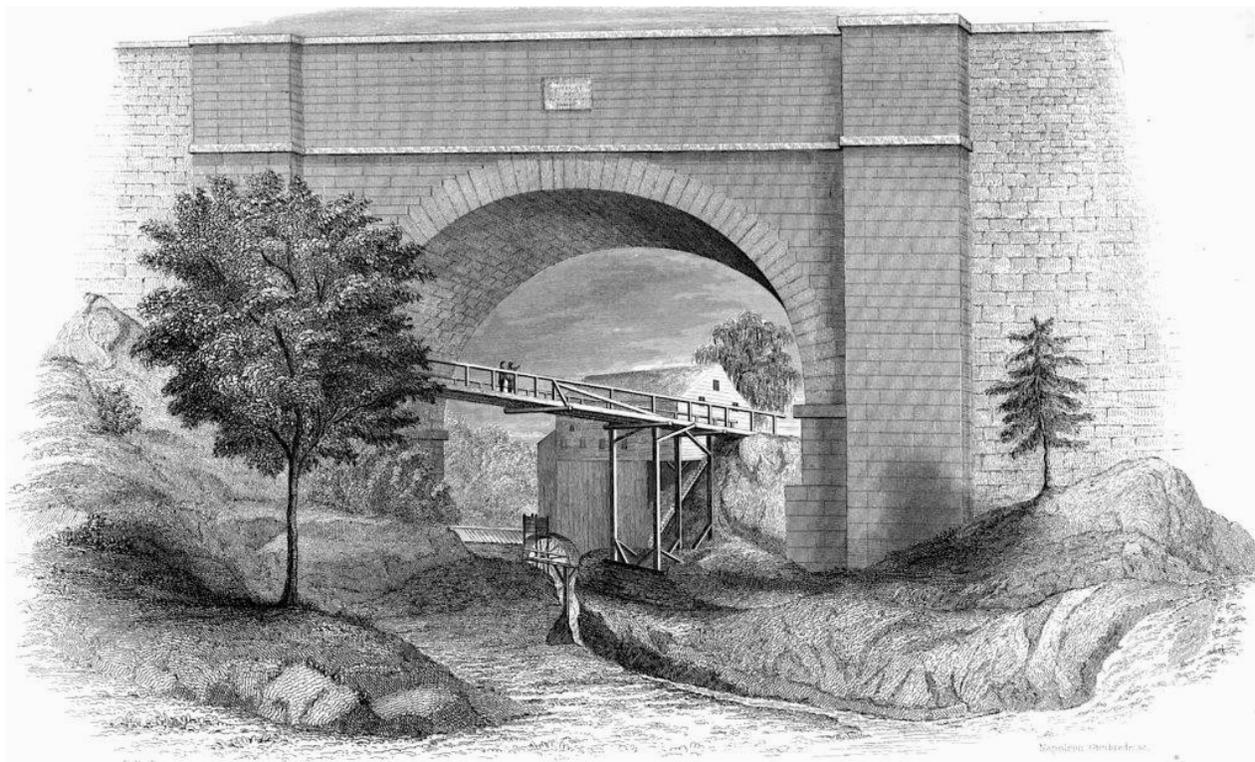
Masons on scaffolding, re-pointing masonry of the Double Arch Bridge.



Roger Moore climbing a ladder to the roof of the Weir Building.



Mason re-pointing side wall of the bridge from the platform of a hydraulic lift.



Ossining Bridge, from Illustrations of the Croton Aqueduct, by Fayette B. Tower (1843). The image shows the original wooden bridge that carried Broadway over Sing Sing Kill. It was later replaced by an arched masonry bridge, forming the famous Double Arch.

walkway. While bad weather slowed outside excavation, work was done in the weir building to replace the metal staircase and walk grids in the tunnel. The lighting and wiring were also replaced. As the weather improved, sections of the steel post parapet fencing were removed, repainted and reinstalled. The earth fill on top of the bridge was excavated on one side in preparation for a new drainage system. The system uses three layers of material to filter fine sediment, and cushion and waterproof the aqueduct below. Two layers of different size

gravel are laid on top of the fabric material, then sand; then the new cement paving blocks are laid by hand. The joints between pavers are meant to be porous so all moisture can pass down to the drainage channel and be directed into the old drain pipe exiting the weir.

Good progress is being made repointing and resetting stonework on the outside surfaces of the bridge. Workers on scaffolds and hydraulic lifts work in a time-honored tradition, carefully applying mortar to each joint. The workers now, as in the past, represent various groups of immigrants to America.

New York State Parks representatives review the work to make sure it follows correct historic standards and Parks engineers visit the site on a regular basis to check on progress and to work closely with site supervisor Roger Moore, who sequences and choreographs the work, deals with a thick stack of building specifications, teams of workers, and materials deliveries to keep the job on schedule. Work is due to be completed by the end of June.

—Photos by T. Tarnowsky



Two masons work on the walkway cement pavers.

High Bridge Featured at Friends' 2013 Annual Meeting

If the turnout at the Friends' annual meeting was any indication, High Bridge won't have any problem attracting throngs of visitors when it reopens, possibly in the latter part of 2014. There was literally standing room only at Irvington Library on April 7 as Bryan Diffley, manager of the restoration project now underway, talked about the history of the renowned 1848 Aqueduct bridge and described the work that will prepare it once again to receive the public.

Diffley, a civil engineer and project manager with Schiavone Construction Co., paid tribute to the engineers of the original aqueduct, marveling that they could even keep their survey instruments calibrated under the rough conditions that prevailed in the late 1830s. He noted too the dangers for the Irish immigrant workers who had to hand-drill through hard rock and use black powder in those pre-dynamite days, sometimes completing only 18 inches of a drill hole "on a good day." The audience saw photos of the delicate task of removing five granite arches of the bridge in 1927-28; the

arches were then replaced with the steel span over the Harlem River we see today.

The current work includes repairing and repainting the steel arch, cleaning all the stonework on the bridge, and repointing the masonry entirely with the same natural cement from Rosendale, New York (Ulster County) used in the original construction. Renderings were shown of the access ramps to be built outboard of the bridge at both ends to facilitate access by people with wheelchairs, bikes, and baby strollers. Authorities are still seeking a way for the public to see into the pipe chamber beneath the deck of the bridge – the large 90-in. water main is intact, though only 60 to 80 ft. of the original two 36-in. pipes remain, on the Manhattan side. All parts of the pipe chamber, or "attic," will be rehabilitated.

The High Bridge talk was preceded by a brief business meeting conducted by Friends president Mavis Cain. The following board members were re-elected: Douglas Emilio, John Flack, Carl Grimm, Robert Kornfeld, Jr., Ildiko Viczian, and Elisa Zazzera. Charlotte Fahn introduced the speaker. She first acknowledged the dedicated stewardship of the New York City Parks Department for restoring and reopening the High Bridge and the many Old Croton Aqueduct projects accomplished over the last 10 years. She noted the varied roles of the city's Department of Environmental Protection as an important partner.



Brian Diffley, project manager of the High Bridge restoration, at the groundbreaking on Jan. 11, 2013. (Photo by S. Kelsey)

MEMBERSHIP COUPON

Your tax-deductible contribution helps to protect and preserve the trail.

- Renewal
- Friend \$20
- Good Friend \$50
- New Member
- Students & retirees \$10
- Best Friend \$100

Please make check payable to Friends of the Old Croton Aqueduct. Send it with this coupon to the Friends at Keeper's House, 15 Walnut St., Dobbs Ferry, NY 10522-2109.

Name _____
Address _____
City/State/Zip _____

Please let us know if you would like to volunteer.

For inquiries about Old Croton Aqueduct State Historic Park or to report trail conditions, call Park Manager Gary Ricci at 914-693-5259; mailing address: 15 Walnut Street, Dobbs Ferry, NY 10522.

Brian Goodman, Aqueduct Manager 1992-2002

It is with sadness that we report the death of former Aqueduct state park manager Brian Goodman on June 2. Brian had moved from his home in Anchorage, Alaska, to Utah in his last few weeks of life to be near his family.

Brian, whose first career was as a British trade official and then with Barclays Bank in New York, came out of retirement to become Aqueduct manager from 1992 to 2002. During his tenure he gradually became "Mr. Aqueduct," for



Brian Goodman at far left with Mavis Cain (with grandson Evan) and Bill Cassella of the Friends, Gov. George Pataki, Gwen Thomas and Charlotte Fahn of the Friends and then-Hastings trustee David Walrath, 2001.

good reason. He was ever-present on the trail, befriending neighbors, town workers, and officials, and was a natural at public relations. He practiced his own brand of enforcing the rules with diplomacy and charm, and that British accent! He wrote beautifully and gave Aqueduct talks and tours tirelessly. Always an ardent Aqueduct advocate, he worked hard for more resources for the park. It was likely his initiative and persistence that eventually resulted in the park being upgraded in 1999 from a state trailway to a state historic park, only the fourth in the state at that time.

For the Friends, Brian was always a source of inspiration and guidance. He lent a hand in so many ways, and was of invaluable assistance as we worked to create our first map-guide of the Aqueduct and as we sought funding for the Keeper's House project. It was fun and a real pleasure to get together on his occasional visits to New York after his move to Alaska. For many of us, a cherished friend has been lost, but wonderful memories remain.

To our readers: It would be a fine tribute to Brian to print, to the extent possible, stories and memories from those who remember Brian from his days as Aqueduct manager. Please take a few minutes to write them down, and address them to Ruth Gastel, newsletter editor, at ruthg@iii.org or by mail c/o Friends (address on back cover). We thank you in advance. — C. Fahn

Future Events — Watch for Updates

Celebration planned in July in Ossining

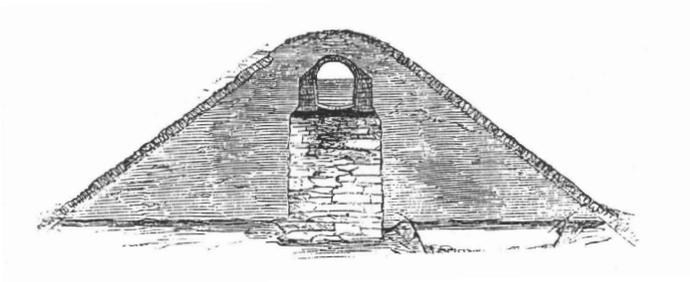
The Friends are thrilled at the generous allocation of funds by Governor Cuomo for the preservation of the bridge that holds the Aqueduct at Ossining. It has been a huge and necessary job, scheduled for completion at the end of June. Since this is the Bi-centennial celebration year for Ossining, the Friends are planning a joint event. Friends president, Mavis Cain, has been in touch with Governor Cuomo's office and we are all hoping the Governor will attend the ribbon cutting celebration planned for the weekend of July 20/21. Watch our website, Aqueduct.org, for the final arrangements.

"Secrets of New York" is planning an episode that includes the Old Croton Aqueduct.

This NYC life (Channel 25) program about the nooks and crannies of New York City is filming an upcoming episode that will tell how the Croton Aqueduct saved the city in the 1840s. If you've seen the program, you'll know that the host, Kelly Choi, has a way of making the secret places of New York exciting and mysterious, whether the viewer is a history buff or just a city lover. Watch Aqueduct.org for the date when the episode will be aired or visit NYC.gov/media. — Mavis Cain

Friends of the Old Croton Aqueduct
Keeper's House
15 Walnut Street
Dobbs Ferry, NY 10522

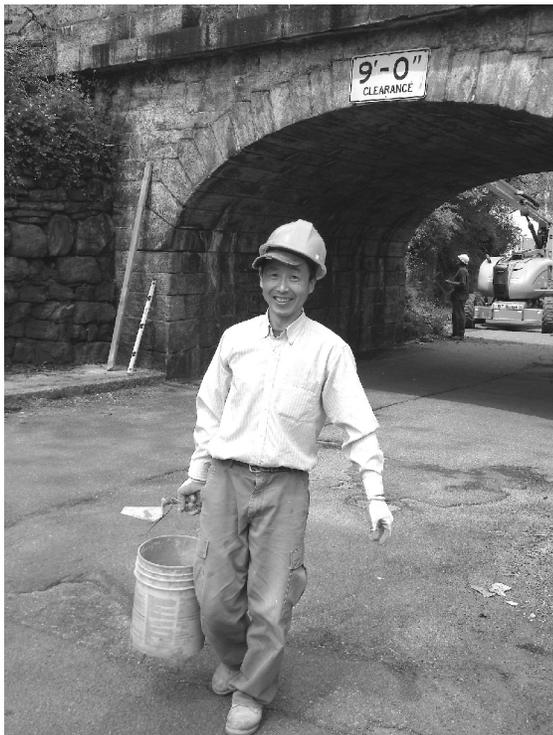
Nonprofit Org.
US Postage Paid
Permit 3038
White Plains, NY



Newsletter: Ruth Gastel, *Editor*. News items, reminiscences, and comments welcome: 914-479-1414 or ruthg@iii.org or by mail c/o the Friends.

© Friends of the Old Croton Aqueduct, Inc., 2013

Newsletter No. 44 Summer 2013



*Smiling worker at the Ossining Bridge.
Photo by T. Tarnowsky*

Friends of the Old Croton Aqueduct is a private, non-profit, volunteer organization formed to protect and preserve the Old Croton Aqueduct. The Friends work to raise public awareness of the Aqueduct and trail, and to secure the resources that will enable this historic greenway to remain unspoiled in perpetuity. *Address:* Keeper's House, 15 Walnut St. Dobbs Ferry, NY 10522-2109; *telephone* 914-693-4117, www.aqueduct.org.

Board of Directors

Mavis Cain *President*

Robert Kornfeld, Jr. *Vice-President*

Edward Brody *Treasurer*

Holly Daly *Secretary-Membership*

John Flack *Secretary-Meetings*

Eileen Charles

Carl Grimm

Frederick Charles

Sara Kelsey

Laura Compagni

Joseph Kozlowski

Douglas Emilio

Constance Porter

Charlotte Fahn

Thomas Tarnowsky

Ruth Gastel

Ildiko Viczian

Katharine Gates

Lesley Walter

Elisa Zazzera

