

# Request for Bids

## MANUFACTURE OF SIGNS: QUARRY PARK INTERPRETIVE SIGNAGE PANELS AND EXHIBIT BASES

### SPECIFICATIONS

(Dated: 05/21/2021)

Bid Opening Date:  
Friday, June 4, 2021  
9:00 A.M.

ONLINE BID OPENING ONLY

Village of Hastings-on-Hudson  
7 Maple Avenue  
Hastings-on-Hudson, NY 10706  
Tel: (914) 478-3400  
Fax: (914) 478-4624  
Website: [www.hastingsgov.org](http://www.hastingsgov.org)

Table of Contents

**NOTICE TO BIDDERS** ..... 3

**Project Summary** ..... 4

**Background & History** ..... 4

**Scope of Services** ..... 4

**General Requirements**..... 5

## **NOTICE TO BIDDERS**

The Village of Hastings on Hudson hereby invites the submission of sealed bids for:

### **MANUFACTURE OF SIGNS: QUARRY PARK INTERPRETIVE SIGNAGE PANELS AND EXHIBIT BASES**

Proposals will be received until 10:00 A.M. on:

**Date**

June 4, 2021

By:

**Joseph Cerretani**

Village Clerk

7 Maple Avenue

Hastings-on-Hudson, NY 10706

The scope of work includes the manufacture of outdoor signage and exhibit bases, and will be made available beginning on Friday, May 21, 2021 online at <https://www.hastingsgov.org/village-clerk/pages/legal-public-notices> or by sending an email to the Village Clerk at [JCerretani@hastingsgov.org](mailto:JCerretani@hastingsgov.org).

In addition to the above, the Village of Hastings-on-Hudson has partnered with BidNet as part of the Empire State Purchasing Group and will post our bid opportunities and any addendums to this site. As a vendor, you can register with Empire State Purchasing Group and be sure that you see all of the Village's available bids, addendums, and opportunities. Detailed plans and specifications for said bid may be obtained through the Empire State Purchasing Group at the following link: [www.bidnetdirect.com/new-york/hastings-on-hudson](http://www.bidnetdirect.com/new-york/hastings-on-hudson)

Proposals will be opened June 4, 2021 at 10:00 A.M.

Awards will be made at a meeting to be held at a later date.

Clearly label your package:

### **MANUFACTURE OF SIGNS: QUARRY PARK INTERPRETIVE SIGNAGE PANELS AND EXHIBIT BASES**

The Village of Hastings-on-Hudson reserves the right to reject any or all proposals.

Interested Consultants may submit questions in writing to [villagemanager@hastingsgov.org](mailto:villagemanager@hastingsgov.org) up to 4:00 PM on May 26, 2021.

Answers will be posted online at <https://www.hastingsgov.org/village-clerk/pages/legal-public-notices> and distributed to all known bidders by 4:00 P.M. on May 28, 2021.

## Project Summary

The Village of Hastings-on-Hudson, NY (the “Village”) is soliciting proposals for the manufacture of outdoor interpretive signage panels and exhibit bases to be delivered with all necessary hardware, ready for installation on site, no later than August 15, 2021 to the specifications as described herein.

Graphic design work will be provided by the Village in the format necessary but is attached as a PDF for informational purposes.

## Background & History

With the construction of the Croton Aqueduct in 1837-1842 and the opening of the New York and Hudson Railroad line, Hastings-on-Hudson was transformed from a farming village into a residential suburb and industrial center and incorporated in 1879. The Quarry, once a profitable business and the source of stone for buildings up and down the Hudson, is nearing completion as a park and is ready for finishing touches.

## Scope of Work

The project includes the fabrication of signs and exhibit bases with instructions for installation to be provided by the manufacturer.

### *Sign and Exhibit Base Fabrication*

All graphics panels will be manufactured by a process of fiberglass embedment, gel coat laminate, high pressure laminate (HPL) or proprietary trade name products such as Imageloc or Dendron.

Exhibit bases will be aluminum and coated on all sides to form a protective layer with either automotive paint or powder coating.

All sign panels and bases will be fabricated to endure harsh weather—including temperature extremes, UV exposure, wet, snow and ice and will not corrode, rust, or deteriorate over the required life of the signs. They will also withstand possible vandalism and graffiti.

The signs must be highly durable with a minimum 10-year warranty covering UV fading, cracking, peeling, blistering and delamination with no exclusions for extreme weather temperatures. The sign surface will facilitate easy removal of graffiti without damaging the sign’s surface.

The panel dimensions shall be as follows:

- (1) panel 48” wide X 30” tall with frame and “low profile” angle mount double pedestal exhibit base
- (1) panel 48” wide X 30” tall with frame and “low profile” angle mount double pedestal exhibit base
- (1) panel 36” wide X 30” tall with frame and “low profile” angle mount double pedestal exhibit base
- (1) panel 40” wide X 36” tall with frame and “low profile” angle mount double pedestal exhibit base
- (1) panel 40” wide X 36” tall with frame and “low profile” angle mount double pedestal exhibit base
- (4) panels 16” wide X 24” tall with single pedestal upright exhibit base
- (4) panels 14” wide X 11” tall with single pedestal upright exhibit base

Exhibit base footings to be designed to ensure stable and secure placement of exhibit bases as well as to prevent significant heaving over time due to weather-related events or erosion. **Specific installation instructions must be included.**



Fabrication and delivery must be within two months of signing the contract.

### *Deliverables*

The Village reserves the right to request additional information from any proposing firm. The Village may contact and evaluate the firm's and subcontractor's references; contact any firm to clarify any response; contact current users of the firm's services' and seek and review any other information deemed pertinent to the evaluation process. One or more selected firms may be invited to interview with the Village.

The firm shall provide one (1) electronic copy incorporated in a single PDF file for review. The electronic copy shall be submitted as a single .pdf file in the firm's name via: [www.bidnetdirect.com/new-york/hastings-on-hudson](http://www.bidnetdirect.com/new-york/hastings-on-hudson).

A physical copy may be mailed to:

Joseph Cerretani  
Village Clerk/Treasurer  
Municipal Building  
7 Maple Avenue  
Hastings-on-Hudson, NY 10706

## **General Requirements**

The proposal must contain all of the following information in the same sequence as presented in this RFP. Each proposal should provide a straightforward and concise presentation adequate to satisfy the requirements of this RFP.

All proposals will include the following requirements:

### *Experience*

Present relevant experience for a minimum of three (3) and no more than five (5) similar projects. Include:

1. Location;
2. Description and size (sketches, plans, photographs);
3. Project Cost;
4. Client;
5. Sub-contractors;
6. Experience of the firm members submitting the proposal;
7. List of Client and Contractor contacts (with telephone numbers and email addresses) who are familiar with the projects.

### *Proposal Presentation*

Include any additional graphic illustration, photographs, articles, or other information that the firm feels are relevant to the proposal.

### *Additional*

Any other work to complete the design work not specifically listed in the RFP should be detailed in the proposal. Any work that is in addition to the items listed in the RFP should be indicated as Additional Alternatives with the cost associated. The cost for the Additional Alternatives should not be included in the final proposal sum and will be approved by the Village separately.

*Sub-contractors*

The selected firm will coordinate all contract activities between the firm and sub-contractors as well as ensure that the project work is completed on schedule and within budget. It is the responsibility of the selected firm to inform the Village of any discrepancies between the proposal and the design.

**Quote Sheet**

<b><u>Work Description</u></b>	<b><u>Unit</u></b>	<b><u>Unit Price</u></b>	
		<b><u>In numbers</u></b>	<b><u>In words</u></b>
<b>Manufacturing Services</b>	<b>Lump Sum</b>		

The Village reserves the right to award the contract for fabrication to any firm, as best meets the needs of the Village.

NOTE: Unit prices include all work necessary to complete each listed item including, but not limited to, labor, materials and incidentals. Unit prices are to be written in both words and numbers. In case of a discrepancy, those shown in words shall govern. All prices are to be in dollars and cents.

**Quote Submitted By:**

\_\_\_\_\_  
(Firm Name)

\_\_\_\_\_  
\_\_\_\_\_  
(Address)

\_\_\_\_\_  
(Telephone No.)

\_\_\_\_\_  
(Printed Name of Authorized Representative Submitting Quote)

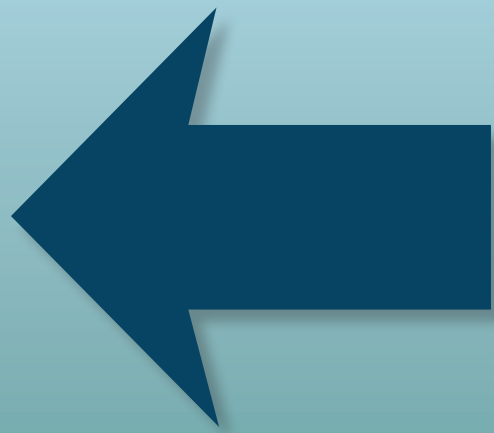
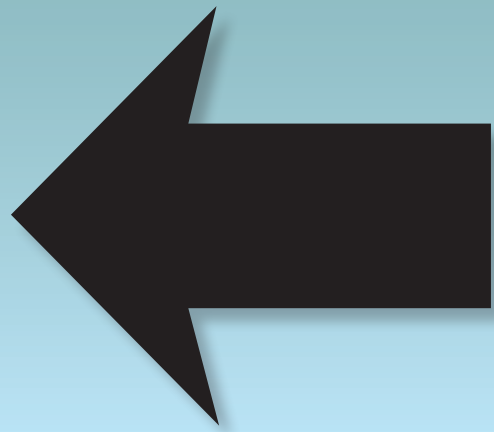
\_\_\_\_\_  
(Authorized Signature)

\_\_\_\_\_  
Date:

# Quarry Park

*Hastings-on-Hudson*

QUARRY  
RAILROAD  
TRAIL



QUARRY PARK

# Quarry Park

*Hastings-on-Hudson*

QUARRY  
RAILROAD  
TRAIL

TO QUARRY PARK

# Quarry Park

*Hastings-on-Hudson*

QUARRY  
PARK





# Quarry Park

Hastings-on-Hudson

## WELCOME TO THE SITE OF HASTINGS' FIRST INDUSTRY ...AND A PLACE WITH A STORIED PAST

### QUARRY PERIOD (1828–1871)



George Harvey, circa 1850.  
PHOTO COURTESY OF THE NEW YORK HISTORICAL SOCIETY

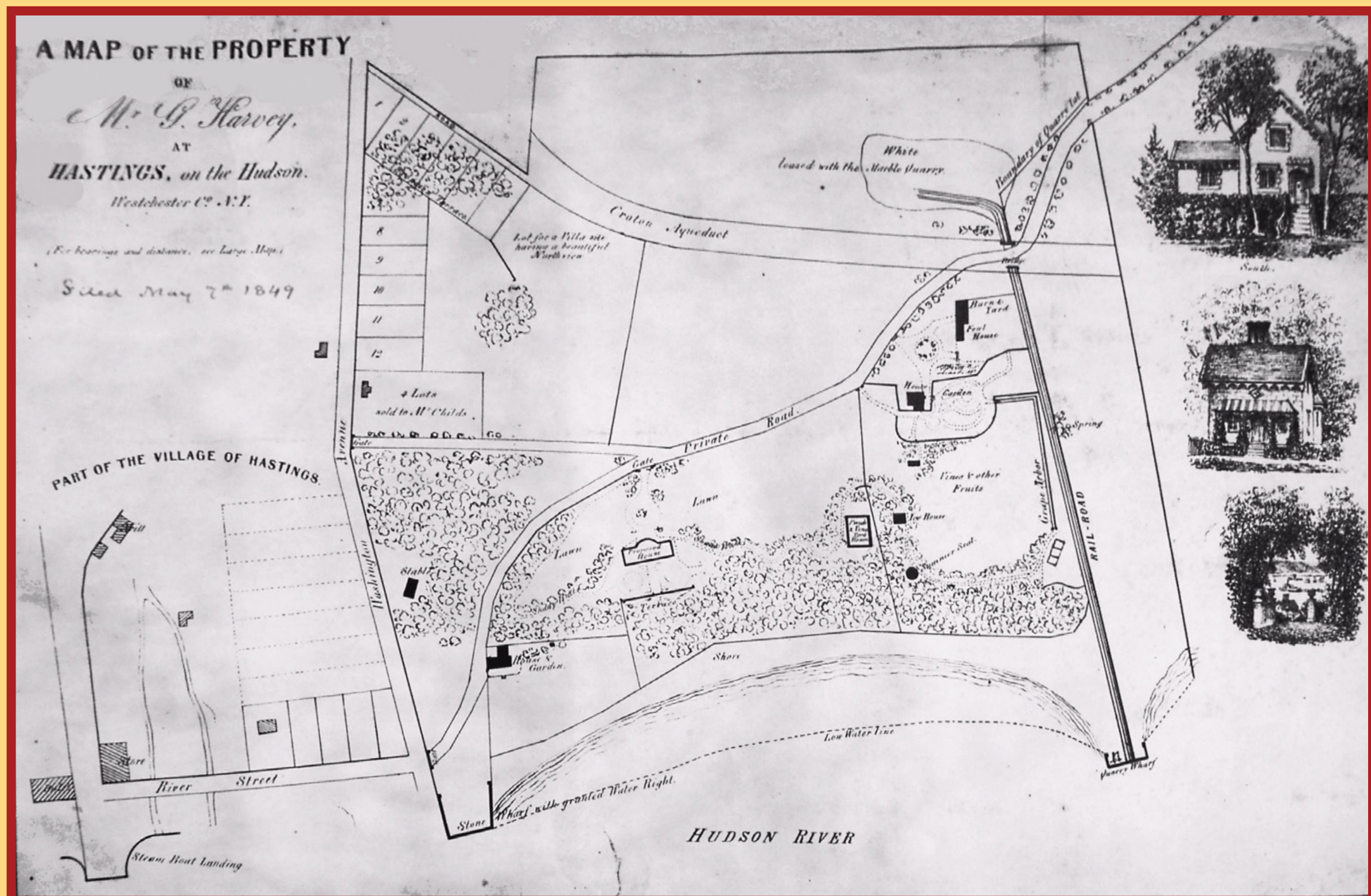
#### HARVEY'S QUARRY AND HASTINGS MARBLE

This land was once owned by Van Brugh Livingston, who quarried white dolomite marble here beginning in 1828. Livingston sold the quarry and approximately 15 additional acres to George Harvey, an English painter and friend of author Washington Irving, in 1834. Harvey built a home on the property out of stone from his quarry. Later known as the "Marble Castle," the house stood on what is now Warburton Avenue.

In 1835, Harvey leased the quarry to Elisha Bloomer, a hatter from New York City, who built an incline railroad from the quarry down to a wharf on the waterfront. The railroad carried rough stone blocks from the quarry to the Hudson River to be cut and loaded onto sailing ships. From there, the stone was shipped far and wide to construction sites in New York City, along the eastern seaboard and, by some accounts, as far as New Orleans. In 1838, an architect before the Water Commissioner of New York City declared that Harvey's Quarry produced "the best Westchester marble." (See the accompanying sign for more information on structures built of Hastings marble.)

In 1838, Harvey sold 1.35 acres just west of the quarry for the construction of the Croton Aqueduct, being built to carry fresh drinking water to the residents of New York City. The sale reserved a right-of-way for the incline railroad and this necessitated the building of the Quarry Railroad Bridge, believed to be made of stone from the quarry, which was named a National Landmark along with the Croton Aqueduct in 1976. (See the sign at the entrance to the Quarry Railroad Bridge for more information.)

Harvey sold his Hastings property in 1846 and the quarry changed hands several times. While the Civil War disrupted the quarrying operation, business was underway again when scientist John W. Draper, who lived just above the quarry to the east, brought a lawsuit against its owners in 1870. The final blow came on March 29, 1871, when a blast caused a portion of Draper's stone wall to collapse. Two months later, the court ruled in Draper's favor, ordering a permanent injunction against further blasting and ending quarrying at this site.



1849 map of Harvey's 20-acre estate, "Woodbank," which may have been drawn by Harvey himself. Note the path of the incline railroad and the Quarry Wharf, on the right.  
COURTESY OF THE HASTINGS HISTORICAL SOCIETY



Quarry Works, Hastings on Hudson, watercolor on paper by Samuel Colman (1832- or 1833-1920), date unknown.  
Note the blocks of marble awaiting transport by ship.  
IMAGE COURTESY OF THE MUSEUM OF FINE ARTS, BOSTON

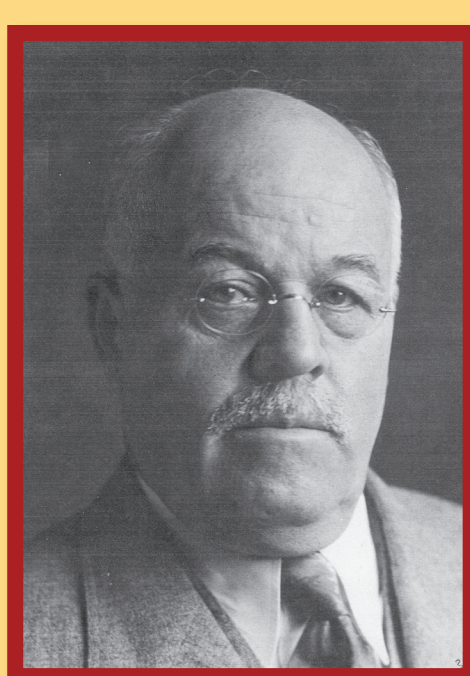
### ABANDONED PERIOD (1871–1936)

Over the ensuing years, the unused quarry filled with trash and debris. In 1899, National Conduit Company purchased the quarry and laid pipes along the path of the former incline railroad to its new factory at the river's edge, where the water was used as coolant. Years later, the quarry ended up in the hands of Anaconda Wire and Cable Company. The neglected old quarry continued to fill up with discards. One newspaper account referred to it as "the eyesore of the town" and "a filth-infested hole in the ground."



Abandoned cars on the path of the former incline railroad, looking east from the Warburton Avenue Bridge.  
PHOTO BY ARTHUR C. LANGMUIR, DATED 1/20/1932. COURTESY OF THE HASTINGS HISTORICAL SOCIETY

### THE ORIGINAL QUARRY PARK (1936–1943)



Arthur Langmuir, 1929  
PHOTOGRAPH BY LEWIS HINE  
COURTESY OF THE HASTINGS HISTORICAL SOCIETY

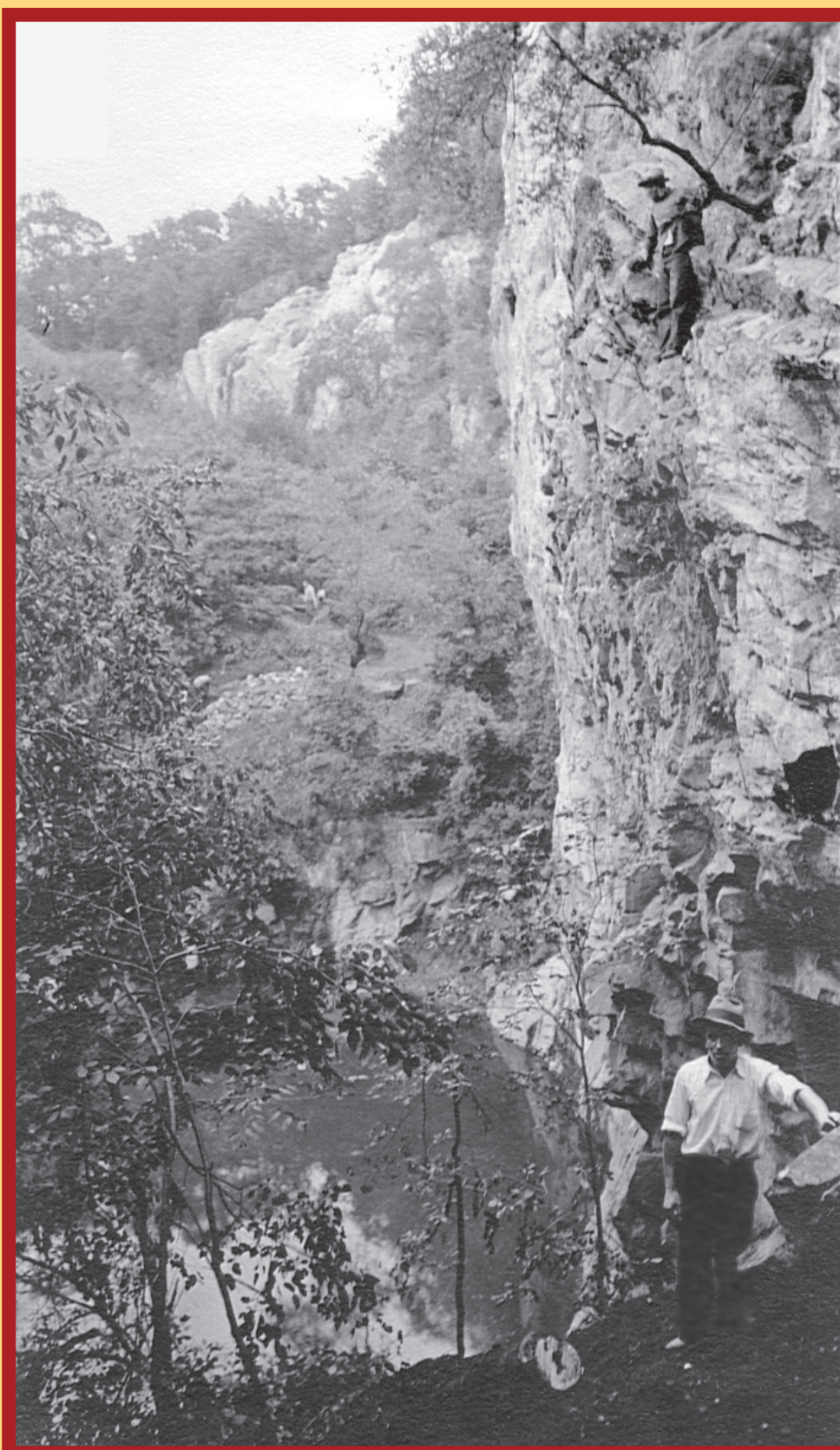
#### TRANSFORMATION INTO A MAGNIFICENT SCENIC OASIS

In 1936, local resident Arthur C. Langmuir, a retired chemical engineer, master photographer and horticulturalist, bought the abandoned quarry from Anaconda, with the intention of turning it into a Village park. He and his wife, Alice, lived in the stone house, which they called Oakledge, that still stands just above the quarry to the southeast. The house had been constructed out of marble from the quarry around 1852 by John William Draper for his sister, Dorothy Catherine Draper.

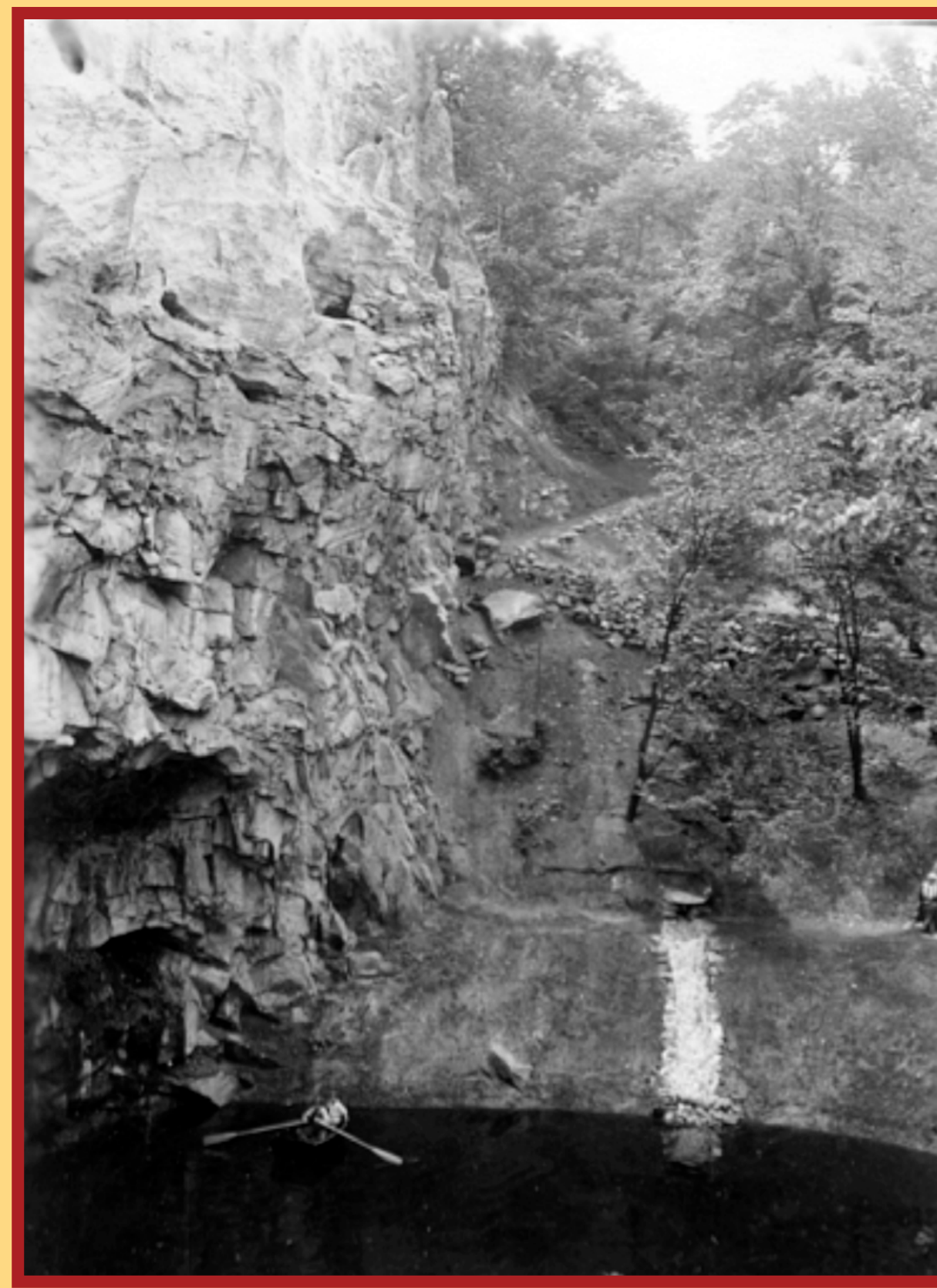
Langmuir was inspired by a trip to Buttes Chaumont in Paris, a public park that was created from an abandoned quarry. Under Langmuir's direction, over 50 truckloads of old tin cans, broken bottles, pots and pans, rusted bed springs, rags, old tires and auto bodies were removed from the site.

Over a span of three years, a crew of 12 men, called "The Quarry Gang," transformed the quarry into an extraordinary scenic park and bird sanctuary with a 25-foot deep lake. They brought in thousands of trees and plants, laid stone walkways, built 80 stone steps descending to the lake, and installed benches. The site was transformed into a place of natural beauty, much beloved by Village residents and renowned throughout the region. Langmuir dubbed the water "Lake Superior" because it was the largest lake in Hastings, and a skiff, "The Queen Mary," was available for boat rides. (See the sign at the base of the cliffs for more information about the original Quarry Park.)

Langmuir had created Quarry Park with the intention of giving it as a gift to the Village, but his offer was turned down, likely due to budget constraints during the Depression. Langmuir died in May of 1941 and his wife Alice two years later. Her will left Quarry Park to Andrew Ryan, who was the Langmuirs' chief gardener for many years. During the period of Langmuir's ownership, Anaconda reserved its right to use the water from the lake and continued to pump it down to the waterfront.



Head gardener Andrew Ryan (in white shirt) and Mike Zabronick (at top) in Quarry Park in September of 1936.  
PHOTO BY A.C. LANGMUIR, COURTESY OF THE HASTINGS HISTORICAL SOCIETY



The Langmuirs enjoying Quarry Park, circa 1938.  
PHOTO BY A.C. LANGMUIR, COURTESY OF THE HASTINGS HISTORICAL SOCIETY



The Quarry Gang in September of 1936. PHOTO COURTESY OF THE HASTINGS HISTORICAL SOCIETY

### DECLINE OF QUARRY PARK (1943–1964)

After inheriting the quarry property from Mrs. Langmuir, Andrew Ryan tried to raise chickens here, and then nursery stock. Both ventures failed and in 1950 he sold the quarry to a real estate corporation that wanted to develop the site. Those plans were abandoned, as was the quarry itself which once more fell into disuse.

### TOWN DUMP: A DEGRADED SITE, ONCE AGAIN (1964–2002)

Years passed and Hastings found itself in need of a place to dispose of household waste. The old quarry was deemed to be the ideal spot and in February of 1964 the Village authorized the purchase of the quarry. The land began to fill in with household discards—rusted bedsprings, car tires, used stoves, old mattresses—eradicating the lake entirely.



Photos of the former quarry, used as the Village dump, circa 2000.  
COURTESY OF CHRISTINA LOMOLINO

### THE ELLSBERG CONNECTION

In 1969, Daniel Ellsberg, famous as the whistleblower who leaked the Pentagon Papers and helped end the Vietnam War, was in hiding from the FBI after releasing the Papers to the New York Times and the Washington Post. Ellsberg had turned over for safekeeping to his brother Harry, then a resident of Hastings, a box of top secret government papers pertaining to US 1950's and 1960's nuclear strategy which had been purloined while Daniel had worked for the government on these very issues. Harry stored them in his basement. In 1971, with the Pentagon Papers controversy heating up, Harry moved the documents into his backyard compost heap, first securing them in a cardboard box inside a green garbage bag. Thirteen days later, Harry transferred them again, this time to the Village dump in the quarry. He buried the bag next to a bluff, using an old gas stove resting above as a marker for the spot.

Later that year, Tropical Storm Doria came through the area and the stove was displaced. Harry tried for months to find his green plastic bag, even renting a backhoe to frantically search through the trash—to no avail. The copied nuclear documents were lost forever, adding an unlikely cold war chapter to the storied history of the Quarry. Ellsberg later relayed the story in his book, *The Doomsday Machine*, published in 2017.



Daniel Ellsberg in 1971  
COURTESY CSU ARCHIVE, EVERETT COLLECTION, INC.

### RECLAMATION EFFORTS: THE NEW QUARRY PARK (2000–2020)

As early as 1967, there were complaints by neighbors who objected to fires, smoke, odors and unsightly piles of trash at the former quarry. In 1998, as mounds of smoldering waste rose higher than the level of the Aqueduct, neighborhood residents mobilized. In 2002, the Village Board of Trustees resolved to officially cease all dumping at the site and, in 2004, appointed a committee of residents to determine the future use of the property. In 2005 the group recommended that a new public park be created. A dedicated group of community activists and Village officials then spent the next 15 years moving the project forward.

Today, at long last, this 5.5-acre site has once again been reclaimed. The Village dump has been remediated and the new Quarry Park, on the site of the original Quarry Park of the 1930's, opened in 2021 for all to enjoy.



Backhoes on east side of quarry in early 2020.  
PHOTO COURTESY OF JIM METZGER



Pile of tires excavated in late 2019.  
PHOTO COURTESY OF CHRISTINA LOMOLINO



Rusted truck excavated during the reclamation in 2019.  
PHOTO COURTESY OF JIM METZGER



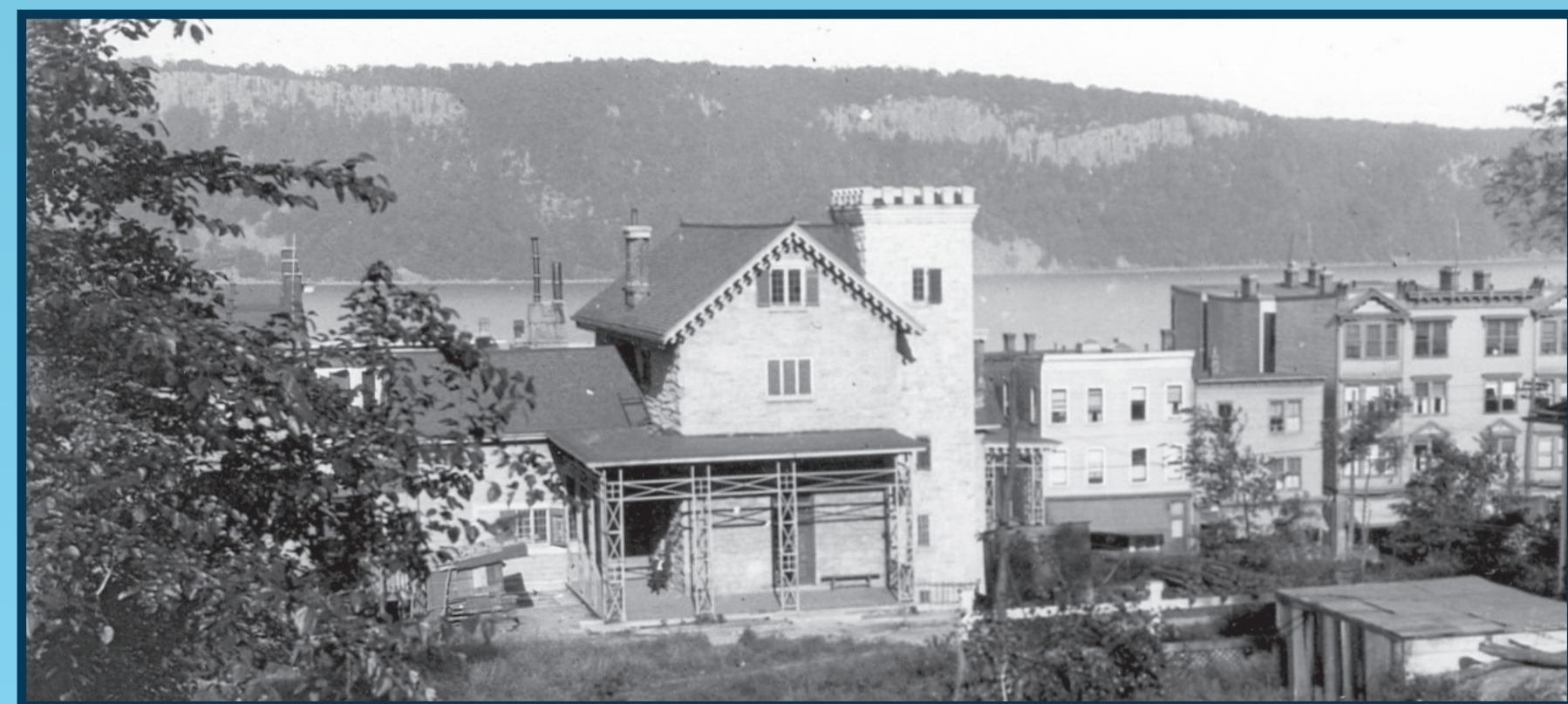
# Quarry Park

Hastings-on-Hudson

## STRUCTURES MADE OF HASTINGS MARBLE

### HARVEY'S MARBLE CASTLE HASTINGS-ON-HUDSON, NY

Circa 1835, quarry owner George Harvey used his own stone to build a house on his estate in Hastings. Subsequent owners added a turret and the house became known as the "Marble Castle." After years of neglect, in 1963 the Castle was razed and its marble remains were used as landfill for an exit ramp for the New York State Thruway. Two related marble structures that are still standing are 13 Division Street, once the caretaker's cottage on the estate, and Harvey's former barn at 2 Marble Terrace.



The Marble Castle in 1924, at Division Street looking west from the Aqueduct, with the Hudson River and Palisades in the background. Today it is the site of a vest-pocket park located between 408 and 414 Warburton Avenue.  
PHOTO COURTESY OF THE HASTINGS HISTORICAL SOCIETY

### BURKELEY CREST HASTINGS-ON-HUDSON, NY

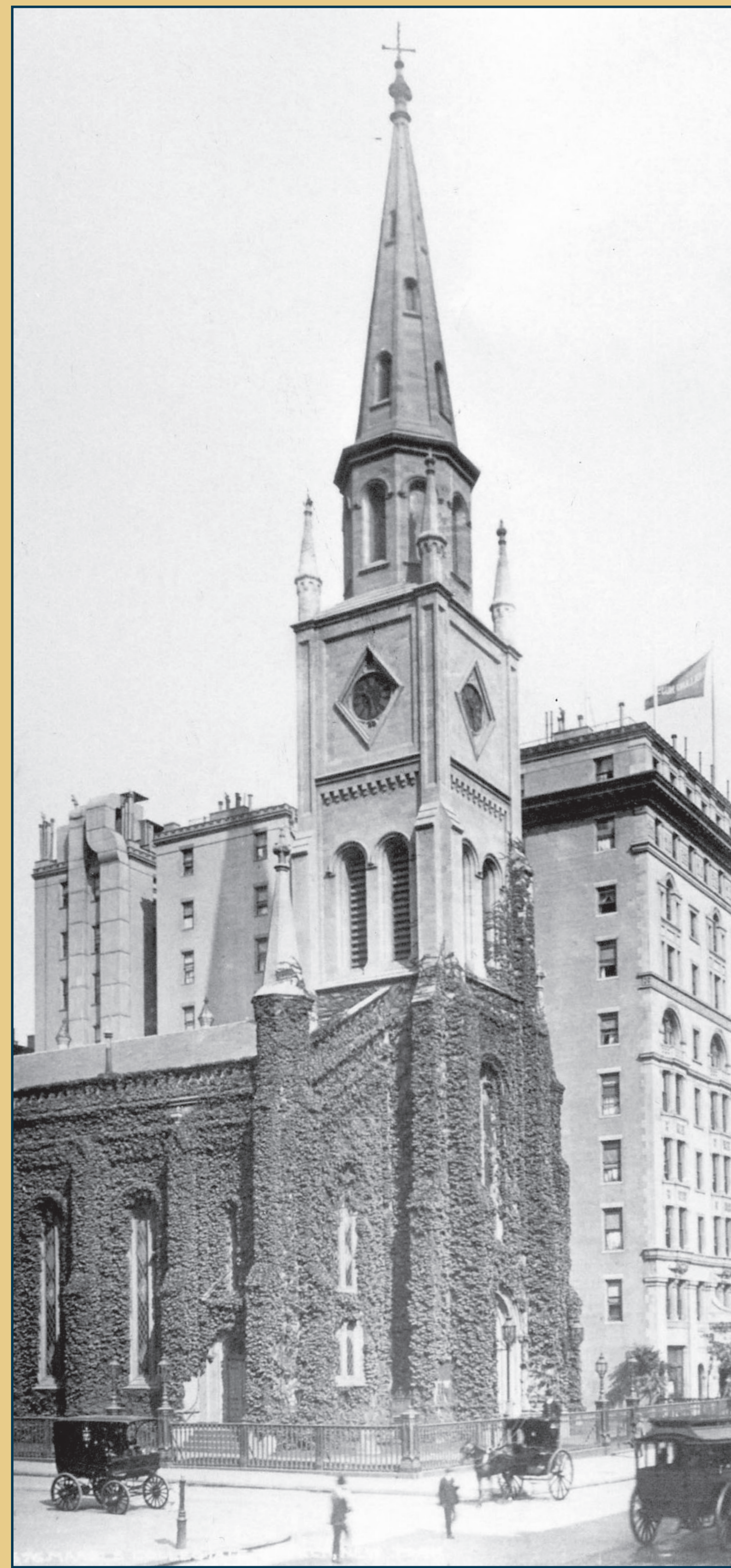
In 1910, Broadway sensation Billie Burke, known later for her role as Glinda the Good Witch in "The Wizard of Oz," bought the old Kirkham estate in Hastings. Renamed Burkeley Crest, the circa 1850 house was a graceful structure made of Hastings marble. After the birth of their daughter in 1916, Billie and her husband, Broadway impresario Florenz Ziegfeld, moved their family into the Hastings mansion and proceeded to live there in high style. The stock market crash of 1929 ruined the Ziegfelds financially and, after Ziegfeld's death in 1932, Billie was forced to sell Burkeley Crest. The new owner demolished the old stone mansion in 1940. Today, the grounds are the site of the Hastings School District's Burke Athletic Fields.



Billie Burke and her dogs standing on the terrace of Burkeley Crest, circa 1912.  
PHOTO COURTESY OF THE MUSEUM OF THE CITY OF NEW YORK

### MARBLE COLLEGIATE CHURCH MANHATTAN

In 1851, stone mason Matthias Bloodgood paid \$60,500 for "the best quality of Hastings marble," to be used for the construction of an impressive new church in New York City. Architect Samuel A. Warner designed the church in the Neo-Romanesque Gothic style, with a soaring, open interior that featured cantilevered balconies with no visible support pillars. The church was dedicated on October 11, 1854. Marble Collegiate Church, still standing today at Fifth Avenue and 29th Street, was designated a New York City landmark in 1967.



Marble Collegiate Church in 1901.  
PHOTO COURTESY OF THE LIBRARY OF CONGRESS, DETROIT PUBLISHING COMPANY PHOTOGRAPH COLLECTION

### THE U.S. CUSTOM HOUSE CHARLESTON, SOUTH CAROLINA

Begun in 1849, construction of the U.S. Custom House in Charleston took 30 years to complete. Hastings marble was used for the initial stages of the Greek-Revival-style building. Construction came to a halt during the Civil War, with bombardments of Charleston by the Northern fleet damaging the partially-built structure. Public monies were not re-appropriated until the early 1870s, by which time the marble quarry in Hastings was no longer operational. Stone with similar characteristics from a quarry in nearby Tuckahoe was secured to finish the project in 1879.



U.S. Custom House, circa 1900.  
PHOTO COURTESY OF THE LIBRARY OF CONGRESS, DETROIT PUBLISHING COMPANY PHOTOGRAPH COLLECTION

### LONGUE VUE HASTINGS-ON-HUDSON, NY

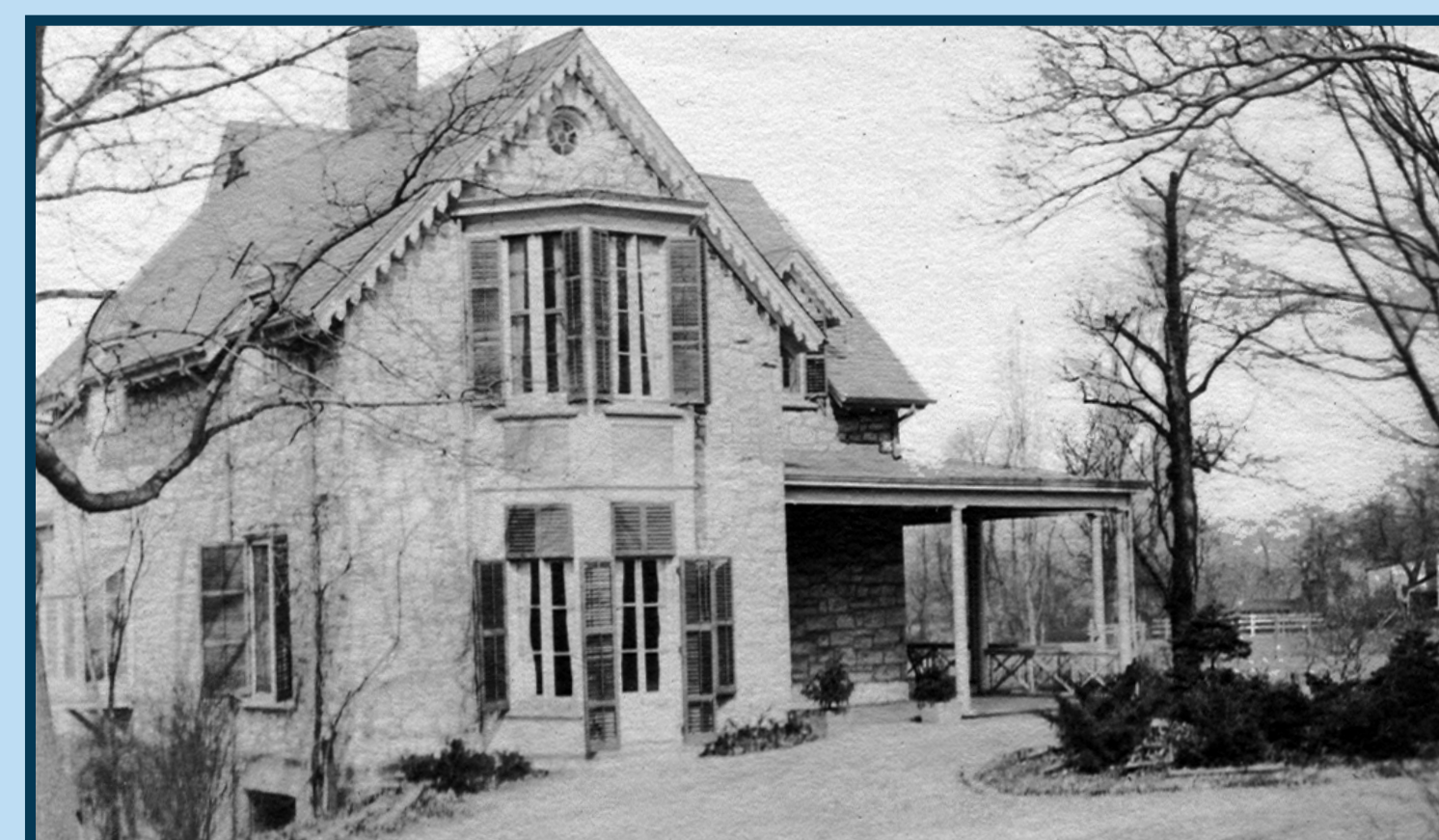
Circa 1860, Louis Anthony Gescheidt, a renowned New York City eye doctor, used Hastings marble to construct a large mansion on Broadway at the southern border of the Village. In 1910, proprietor Ralph Adrian Gushee converted the building into Longue Vue, "New York's most fashionable suburban restaurant." The establishment, with its "Sixty Mile View," quickly became popular with luminaries such as Billie Burke, Flo Ziegfeld, and New York City Mayor, Jimmy Walker, as well as wealthy patrons like the Morgans, Goulds and Astors. Prohibition, followed by the Depression, were not kind to the restaurant and it closed for good in 1933. Twenty years later, Longue Vue was demolished and the eldercare facility, Andrus-on-Hudson, was built on the spot.



Longue Vue Restaurant, seen from the south in 1927.  
PHOTO BY A.C. LANGMUIR, COURTESY OF THE HASTINGS HISTORICAL SOCIETY

### THE MARBLE COTTAGE/OAKLEDGE HASTINGS-ON-HUDSON, NY

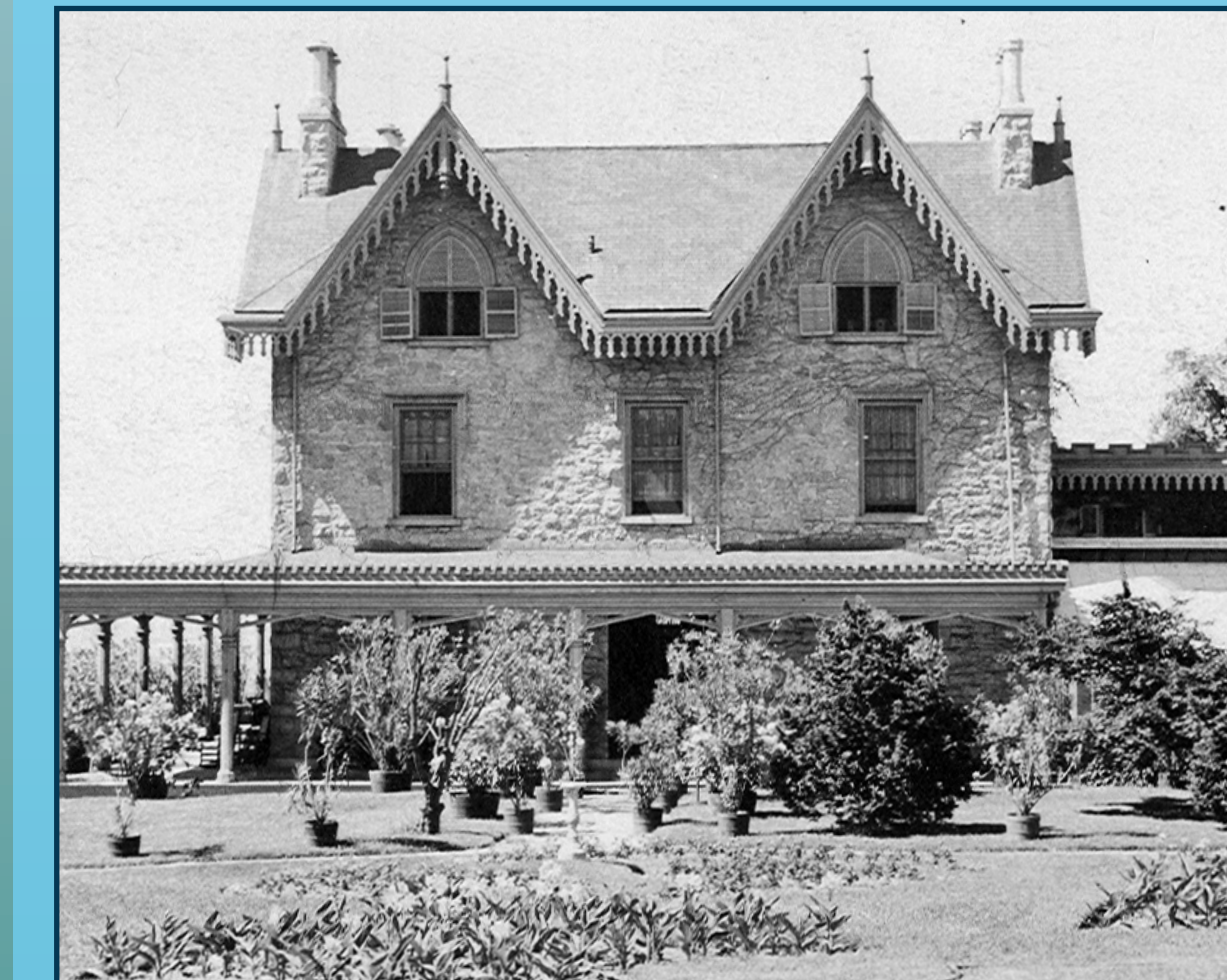
In 1852, John William Draper built a house for his sister Dorothy Catherine. Constructed out of local unpolished marble from the nearby quarry, the house was known at the time as the Marble Cottage. After Dorothy moved out in 1882, the cottage was rented to a number of tenants. Arthur C. Langmuir purchased the property in 1919 and renamed it Oakledge. It became home base for Langmuir's various community projects, including his transformation of the adjacent abandoned quarry into a spectacular park.



Oakledge in the 1920s or 1930s. This house, located on Broadway, is still standing.  
PHOTO BY A.C. LANGMUIR, COURTESY OF THE HASTINGS HISTORICAL SOCIETY

### LOVAT HASTINGS-ON-HUDSON, NY

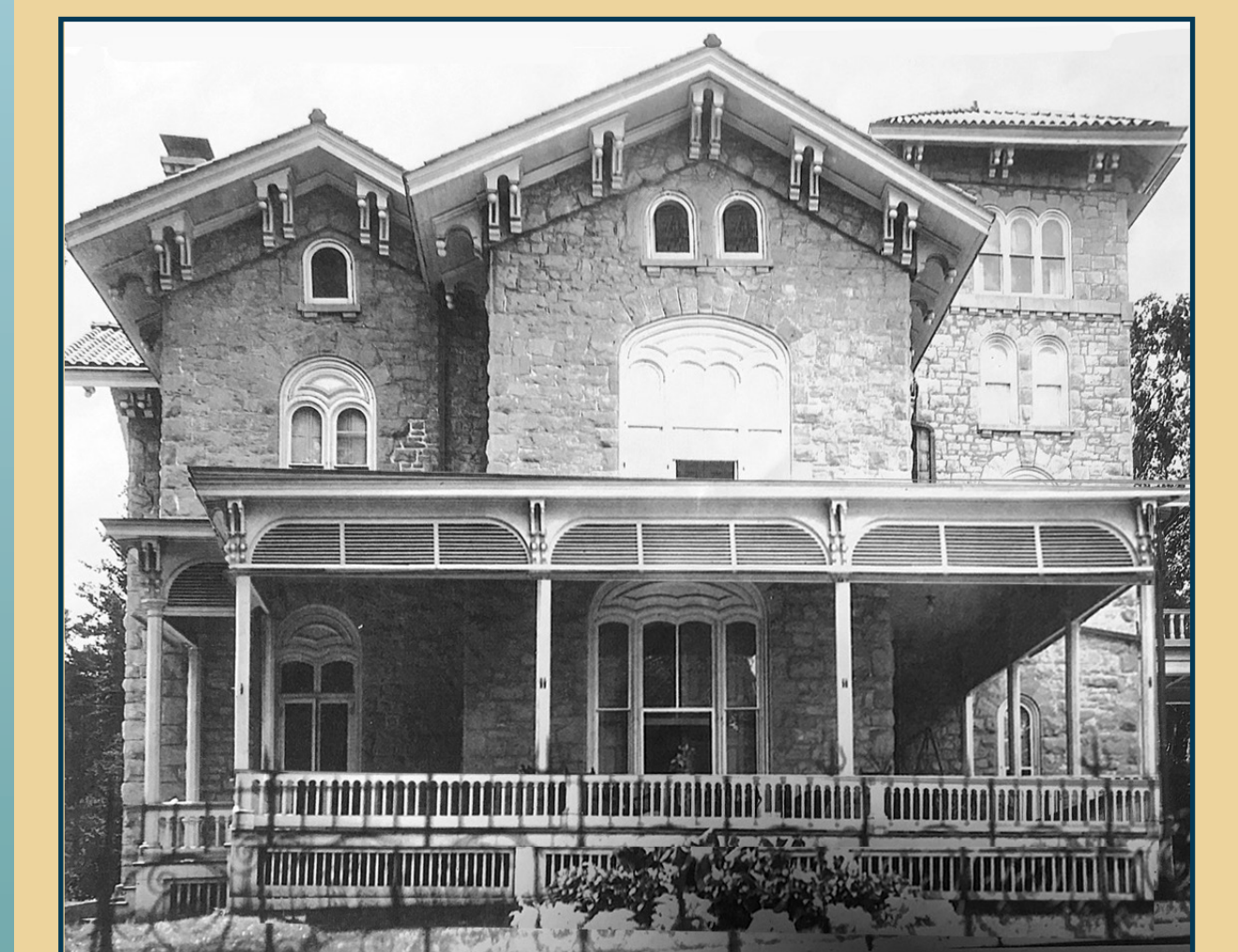
In 1855, leather merchant Thomas A. Fraser built a Greek Revival style country house using Hastings marble on his 20-acre estate. Called Lovat, the house had a northwesterly view of the Hudson and a southwesterly view of the Palisades. A benefactor of the village and active on early school boards, Fraser was instrumental in the planning of Hastings' first public school building, now the home of the Hook & Ladder Company on Main Street. Fraser's descendants lived in Lovat until 1956, when all but .75 acre was sold to a developer.



Lovat, circa 1934. The house is in private hands today.  
PHOTO COURTESY OF THE HASTINGS HISTORICAL SOCIETY

### READ-MOORE HOUSE HASTINGS-ON-HUDSON, NY

Built circa 1855 for Jehiel Read, a New York City hat merchant, this house of Hastings marble was designed by Yonkers architect Lyman A. Gouch. Laid out asymmetrically, it featured a large wrap-around veranda and a four-story tower. A later owner was master silversmith Edward C. Moore, the artistic director for Tiffany and Company, who moved into the house with his family in 1890.



The Read-Moore house in the 1920's or 30's. This private home is located in the Shado-Lawn neighborhood of Hastings.  
PHOTO COURTESY OF LAUREN BLUM



# Quarry Park

Hastings-on-Hudson

# THE PARK TODAY

## REBIRTH OF A SANCTUARY

Following the deaths of Arthur and Alice Langmuir in the early 1940's, the original Quarry Park created on this site in 1936 fell into decline and served as a village dump from the 1960's to the 1990's. In 2005, plans were put into motion to remediate the landfill and replace it, once again, with a beautiful public garden. The tall marble cliffs, the result of quarrying at the site from 1828 to 1871, have been a dramatic feature of both the original Quarry Park and today's park. Blocks of marble, excavated during the remediation, now serve as benches and as reminders of the quarrying era.

The setting has been restored with thoughtfully designed landscapes, utilizing a diverse range of plants native to the northeastern United States. These native plants provide food and shelter for the local fauna, bringing back a lost vibrant habitat.

## THE WHAT AND WHY OF NATIVE PLANTS

A plant is considered native if it grows naturally in the region where it evolved. Since this occurs over thousands of years within a complex and changing web of organisms, climate and geology, native plants grow in close harmony with their surroundings.

There are numerous advantages to landscaping with natives. Native plants have adapted to the climate of their region and are the foundation of the local habitat. They support wildlife by providing food and shelter, and their deep root systems help prevent erosion and soil compaction.

The native wildflowers, grasses, perennials, and trees found in Quarry Park are ideal sources of pollen, nectar and habitat for our local pollinators. These pollinators, which include bees, butterflies, moths and hummingbirds, are essential to the reproduction of most flowering plants and they have evolved to be uniquely adapted to one another.

Many pollinator populations are diminishing due to causes such as pesticide use and loss of habitat. Some are so closely dependent on the plant species



PHOTO COURTESY OF JAN CLOUGH

with which they have evolved that their survival is threatened should those plant populations decrease or disappear.

Monarch butterflies, for example, are entirely dependent on milkweed plants to propagate their species; they lay their eggs on the leaves, the *only* food their caterpillars eat. Monarch populations are in steep decline, in large part due to widespread loss of milkweed habitat.

Native plants are integral to the food web of a region. Insects, birds and small mammals such as squirrels, chipmunks and rabbits eat their leaves, seeds and fruits. In the process, animals help propagate plants by dispersing seeds; for example, squirrels store acorns that can grow into new trees. In turn, small mammals are food for red-tailed hawks, owls and other predators.

Quarry Park illustrates how beautiful this biodiverse approach can be while supporting our local ecology.

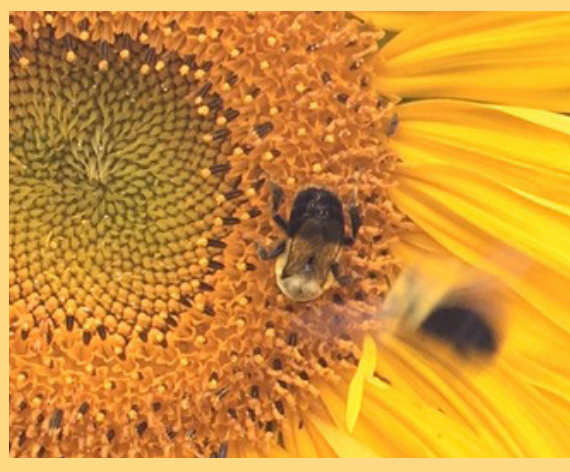


PHOTO COURTESY OF CHRISTINE LEHNER



THIS POLLINATOR-FRIENDLY HABITAT IS PART OF THE POLLINATOR PATHWAYS PROJECT. LEARN HOW TO MAKE YOUR OWN POLLINATOR HABITAT AND JOIN OUR LOCAL PATHWAYS AT [hastingspollinatorpathway.org](http://hastingspollinatorpathway.org)

## GUIDE TO THE PLANTINGS

### A Panhandle

This glade highlights the sculpted topography with a lush grassy meadow and transitions to the edge of the Wooded Bluff. Grasses such as little bluestem (*Schizachyrium scoparium*) provide food and nesting material for wildlife. As the different grasses bloom, go to seed and change color throughout the seasons, the rolling slope provides a vibrant natural habitat.



Little Bluestem  
PHOTO COURTESY OF SALLY AND ANDY WASOWSKI, LADYBIRD JOHNSON WILDFLOWER CENTER

### B Rose Bramble

A wide expanse of over 1,000 Carolina rose bushes (*Rosa carolina*) is planted along the eastern edge of the park, at the base of the marble cliffs. Pink flowers bloom in May, attracting bumble bees and many other pollinators. In late summer and fall, songbirds, wild turkey and small mammals eat the fruit. The roses' leaves and canes also provide excellent shelter for wildlife year-round.



Carolina Rose  
PHOTO COURTESY OF R.W. SMITH, LADYBIRD JOHNSON WILDFLOWER CENTER

### C Terrace Grove

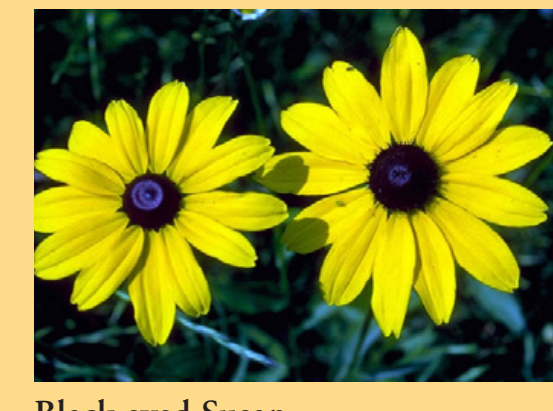
In Terrace Grove, a group of red maple (*Acer rubrum*) are planted with a few American beech (*Fagus grandifolia*) and flowering dogwood (*Cornus florida*). Red maple seeds, buds and flowers are eaten by squirrels, chipmunks and other wildlife. Many insects, especially bees, visit its flowers, too. Dogwood fruit are eaten by numerous animals. The red maples will provide shade for generations to come and are located to frame views of the nearby Hudson River.



Red Maple  
PHOTO COURTESY OF ALBERT EW. VICK, LADYBIRD JOHNSON WILDFLOWER CENTER

### D Flowering Meadow

This beautiful meadow consists of a base of little bluestem grass and is embellished with a dozen native flowering herbaceous plants such as mist flower (*Eupatorium coelestinum*), lanceleaf coreopsis (*Coreopsis lanceolata*) and black-eyed Susan (*Rudbeckia hirta*). These diverse and long-blooming flowers provide valuable habitat for native bees and other pollinators.



Black-eyed Susan  
PHOTO COURTESY OF NORMAN G. FLAIGG, LADYBIRD JOHNSON WILDFLOWER CENTER

Also in the meadow is butterfly milkweed (*Asclepias tuberosa*), one of the milkweed species preferred by monarch butterflies for egg-laying. Little bluestem is a native grass that serves as the larval host plant for several species of skipper butterflies. Its seed is eaten by many types of birds and the plant provides overwintering habitat for a variety of insects, ground birds and small mammals.



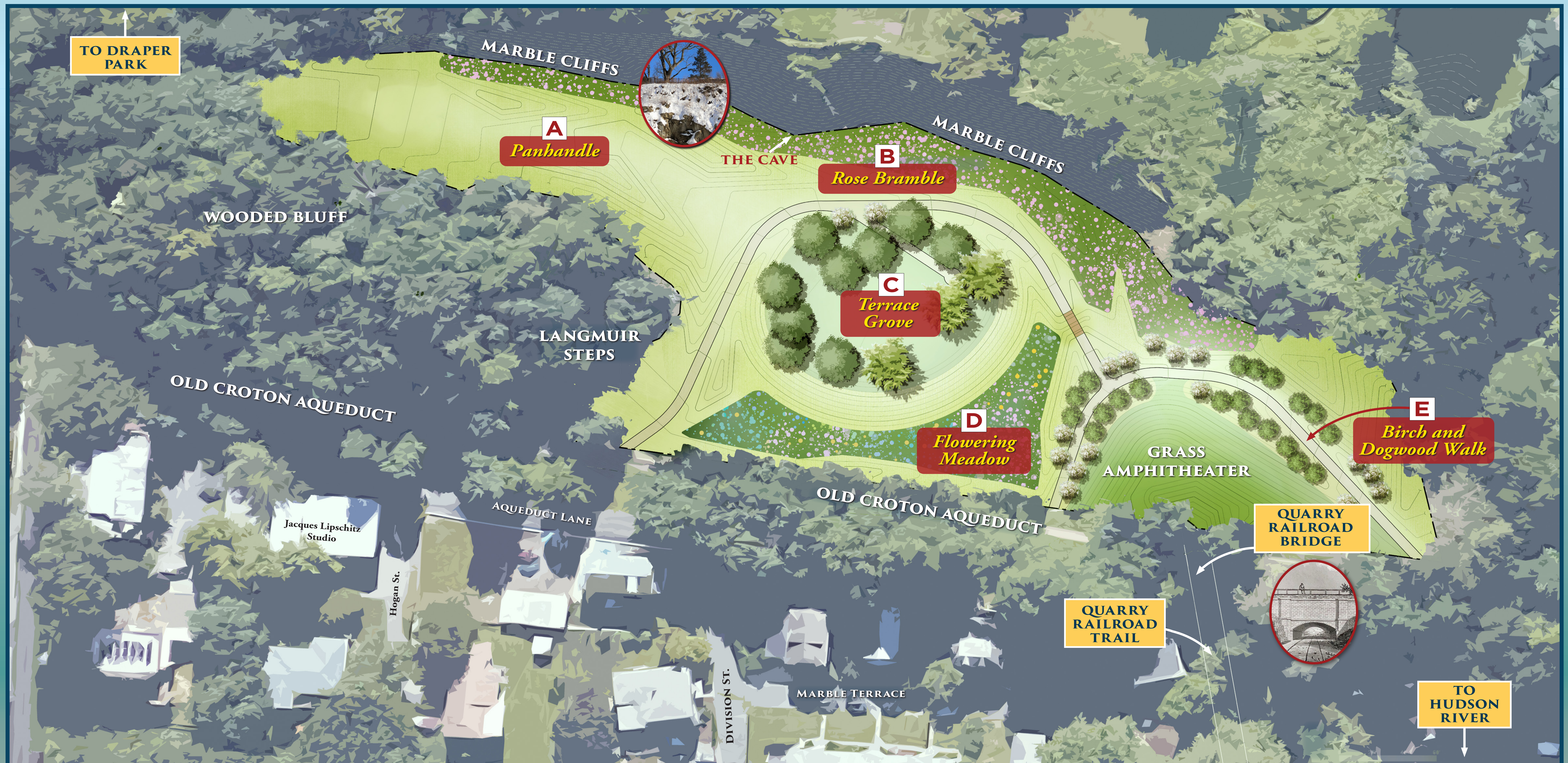
Butterfly Milkweed  
PHOTO COURTESY OF JAN CLOUGH

### E Birch and Dogwood Walk

A mixture of flowering dogwood and dwarf river birch (*Betula nigra* "Little King") lines this welcoming wooded walkway south of the Terrace Grove. Flowering dogwood is a wildlife magnet throughout the seasons. In spring, native bees and other pollinators are attracted to its flowers. Bright red fruits are produced in the fall, which are eaten by many songbirds including American Robins and Northern Cardinals. The eastern chipmunk, skunks and many other mammals consume its fruit as well. In the winter, flowering dogwood provides shelter and overwintering habitat for various wildlife species.



Dogwood  
PHOTO COURTESY OF ARA GUZELMIAN





# Quarry Park

Hastings-on-Hudson

# THE ORIGINAL PARK

The 5.5-acre site that surrounds you was a marble quarry from 1828 to 1871, making it the first industry in Hastings. When Arthur C. Langmuir bought the abandoned quarry in March of 1936, it was a mass of tangled weeds and wild growth, stripped of usable wood and strewn with trash. Langmuir's goal was to transform it into a lushly landscaped park, along the lines of Buttes Chaumont, a popular public park in Paris, France created from a former quarry. He hired 12 workmen under the supervision of head gardener Andrew Ryan, a team that came to be known as the "Quarry Gang." Langmuir would spend thousands of dollars of his own money to make his vision a reality.

The first order of business was to install a sturdy fence around the entire property. Then the Gang got to work. By the end of 1936, an astounding 2,000 small trees, 1,000 rose bushes and 800 shrubs had been planted. These included holly, English larch, flowering cherry trees, hemlock, juniper, poplars, weeping willows, apple trees, mock orange, Norway and white spruce, arborvitae, white pine, locust trees, barberry, maples, forsythia and Japanese quince, as well as vines to cover the jutting rocks. There was also a peach orchard made up of 25 trees and a dogwood grove of 70 trees.

Langmuir had 80 stone steps carved into the quarry rock. Walking paths were laid out throughout the site and over 30 benches were installed. A total of 80 Adirondack chairs, painted blue, red and yellow, were scattered throughout. Arthur's wife Alice, an accomplished gardener, was put in charge of creating garden spots within the park.



Members of the Langmuir family in the "Queen Mary" on "Lake Superior" in November, 1936. The lake was 100 feet long, 50 feet wide and 25 feet deep when waters were high, with the marble cliffs soaring 100 feet above it. Children at the time were told the lake was "bottomless."

PHOTO BY A.C. LANGMUIR  
COURTESY OF THE HASTINGS HISTORICAL SOCIETY

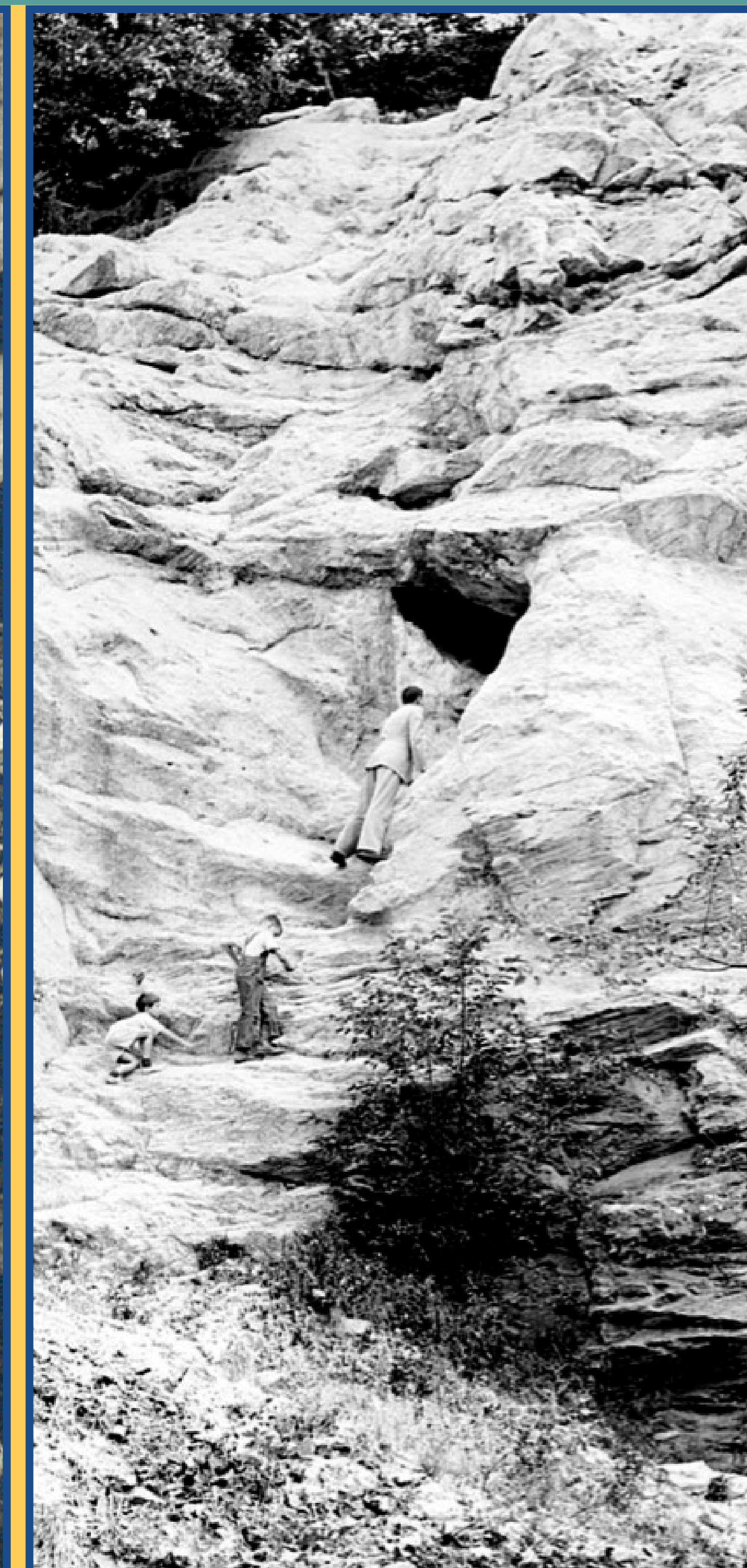
“At low water, one may walk along the edge of the tiny lake at the foot of the quarry to explore its caves and nearby grottos, but at high water, a rowboat (named the “Queen Mary”) ferries those who care to use it across... On clear days, one may see as far south as the Statue of Liberty and as far north as the Beacon Range.”

(From a pamphlet for a May 1939 garden visit by the Westchester County Children's Association)



Quarry Park in September, 1936.

PHOTO BY JOHN VAN DE WATER  
COURTESY OF HASTINGS HISTORICAL SOCIETY



The caves, pictured here c.1936, were a favorite feature of the original Quarry Park and a source of fascination for decades afterwards.

PHOTO BY A.C. LANGMUIR  
COURTESY OF THE HASTINGS HISTORICAL SOCIETY



The "Quarry Gang" in Quarry Park, 1936. A remnant of their work, the "Langmuir Steps," is still partially visible at the southern end of the Wooded Bluff.

PHOTO BY A.C. LANGMUIR  
COURTESY OF THE HASTINGS HISTORICAL SOCIETY

## The Bear Den

A large female bear...has settled in a cave near the bottom of the old Hastings marble quarry. And—now comes the sensation of the whole affair—since moving into the cave she has become the mother of two furry cubs. Children found them.

From the stories told by the youngsters, it appears that the bear family lived in peace and plenty until their tracks in a snowdrift were seen. Schoolchildren playing in the quarry had little trouble tracking them to the mouth of the cave. A few snowballs thrown into the dark recess had more than the desired effect and with a roar just like a blast from a locomotive, the old bear poked her head out and with three more roars for luck, started after the children.

The youngsters hurried back to town to relate the finding of the bear. Since then, two men went to the quarry and verified the story...the men actually were chased away from the mouth of the cave while the cubs grinned and rolled around on the ground at their mother's ability to chase off two-legged creatures.

Some men suggested a bear hunt but the game warden became indignant and forbade them to bring rifles to the quarry. "Nothin' doin'," the official said. "These here bears are here to stay and Hastings-on-Hudson is likely to become famous."

The old bear is believed to have crossed the Hudson on ice floes a week or so ago. She probably came from the New Jersey section of the Interstate Park.

(From an article in the New York Herald, February 13, 1918)



# Quarry Park

Hastings-on-Hudson

## THE QUARRY RAILROAD TRAIL

Quarrying of dolomite marble began at this location in 1828 and soon became the first industry in what would become Hastings-on-Hudson. Painter George Harvey purchased the quarry in 1834, including the Quarry Wharf on the Hudson River.

In 1835, Harvey leased the quarry to Elisha Bloomer, who began expanding the business. Bloomer constructed an incline narrow-gauge railroad on this spot with a steam engine, likely imported from England, to haul rough marble blocks from Harvey's Quarry down to the wharf. Workers then loaded the blocks onto sailing ships for transport to construction sites mainly in Manhattan and along the East Coast. Hastings marble was highly valued, particularly for use in the Greek Revival style architecture, popular at the time.



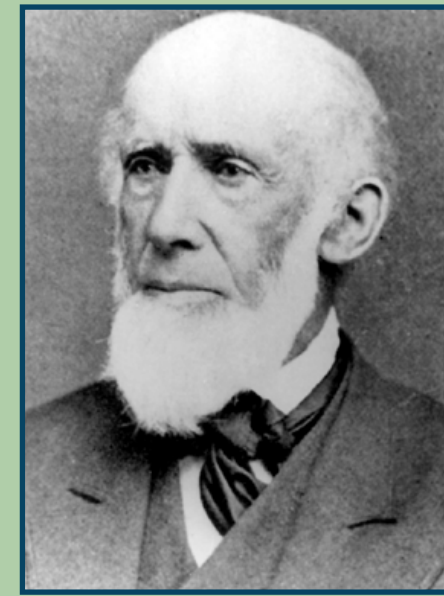
Fragment of a circa-1860's photo showing the Quarry Railroad car loaded with cut marble at the Quarry Wharf on the Hudson River. COURTESY OF THE HASTINGS HISTORICAL SOCIETY

In 1838, Harvey sold land just west of the quarry to the City of New York for the construction of the Croton Aqueduct, one of the largest public works projects of the era. The sale preserved the right of the quarry to operate the incline railroad. To accommodate this, the Quarry Railroad Bridge was designed and built here by John B. Jervis in 1838-1839, out of stone believed to be from Harvey's Quarry. Jervis was America's leading consulting engineer at the time and chief designer of the 41-mile Croton Aqueduct, which provided New York City's fresh water supply from 1842 to 1891. The Aqueduct was built in response to the fires and epidemics that repeatedly devastated New York City, owing to its inadequate water supply and contaminated wells.



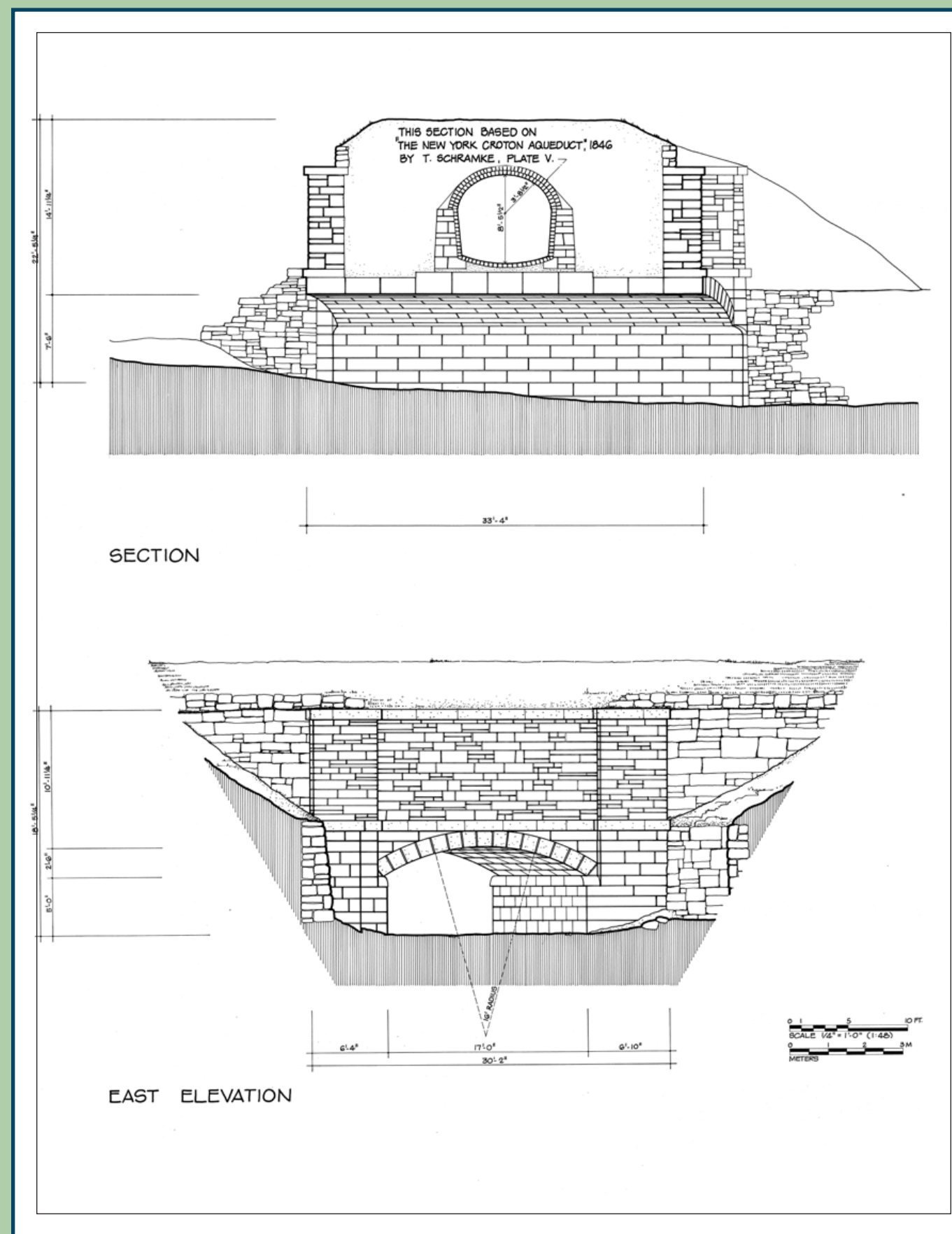
Lithograph of the Quarry Railroad Bridge under the Croton Aqueduct shortly after its construction. From the 1843 book *Illustrations of the Croton Aqueduct* by F. B. Tower. COURTESY OF THE LIBRARY OF CONGRESS

### JOHN BLOOMFIELD JERVIS (1795-1885)



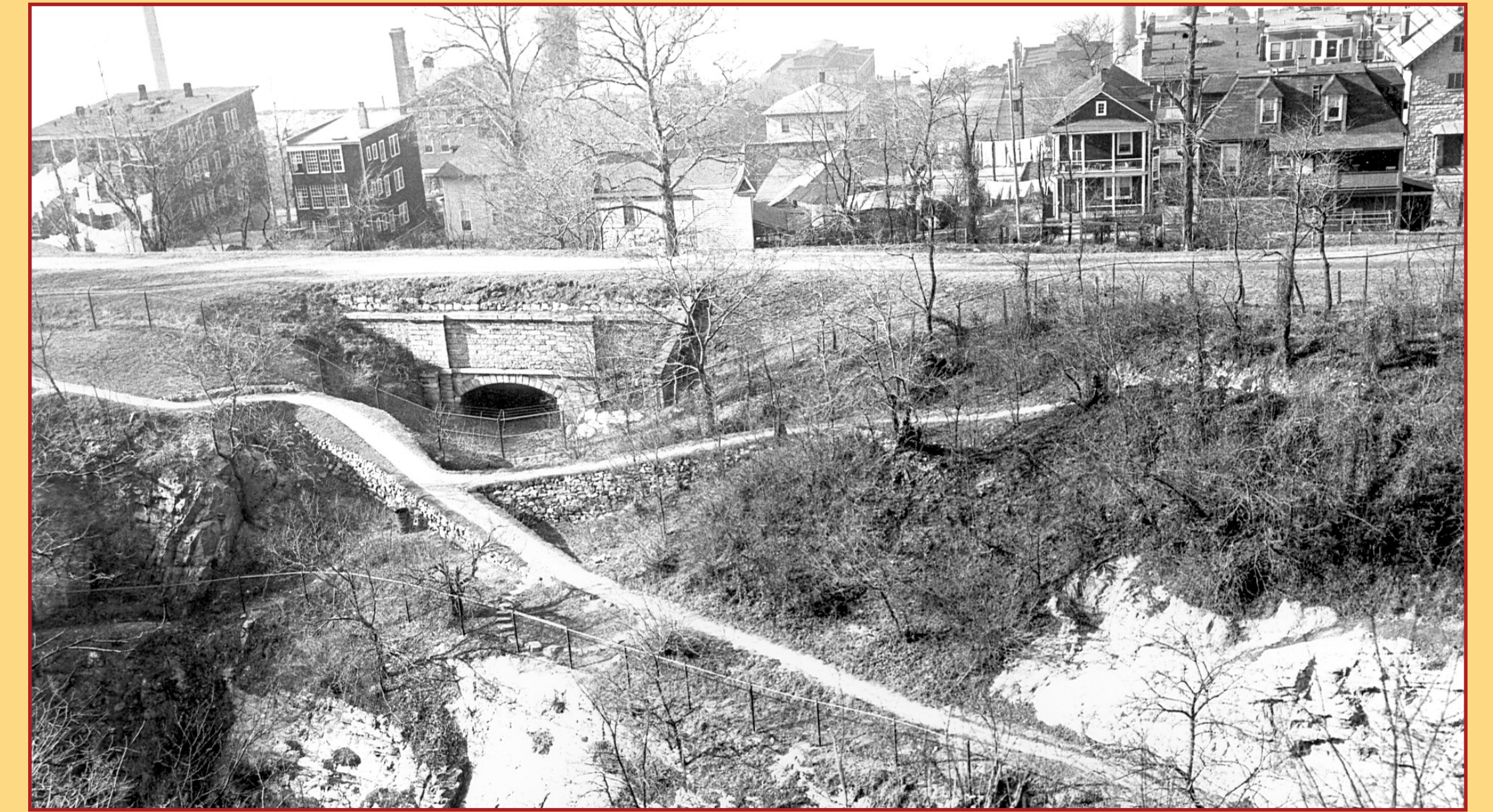
COURTESY OF THE JERVIS PUBLIC LIBRARY, ROME, NEW YORK

In addition to the 41-mile Croton Aqueduct and the Quarry Railroad Bridge, Jervis designed five of America's earliest railroads and the first locomotive to run in the United States. He was also chief engineer of three major U.S. canal projects.



Cross section and east elevation of the Quarry Railroad Bridge, based on *The New York Croton Aqueduct*, by T. Schramke, Plate V (1846) recorded by the Old Croton Aqueduct Survey (1975), Office of Archeology and Historic Preservation, U.S. National Park Service. COURTESY OF THE LIBRARY OF CONGRESS

The Quarry Railroad operated until quarrying ended here in 1871. In 1899, the strip of land that had been used for the railroad was bought by the National Conduit & Cable Company, which laid pipes along the route to carry water for use as coolant to its factory on the banks of the Hudson River. Water from the quarry was used for this purpose until 1942.



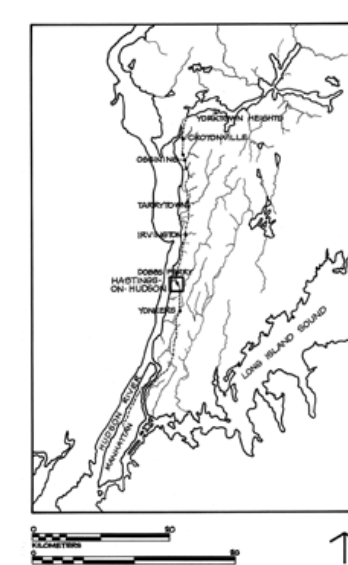
Quarry Railroad Bridge, looking west, and houses on Aqueduct Lane, in 1936. PHOTO BY A.C. LANGMUIR, COURTESY OF THE HASTINGS HISTORICAL SOCIETY

In ensuing decades, the path of the incline railroad became overgrown and fell into disuse. In 2017, as part of the quarry restoration project, the Quarry Railroad Trail was created along the path of the old tracks, to promote walkability in the Village. The trail links pedestrian access between Draper Park, Quarry Park, the Old Croton Aqueduct, Warburton Avenue and the Hastings-on-Hudson waterfront. Both the Old Croton Aqueduct and the Quarry Railroad Bridge are National Landmarks and are on the National Register of Historic Places.



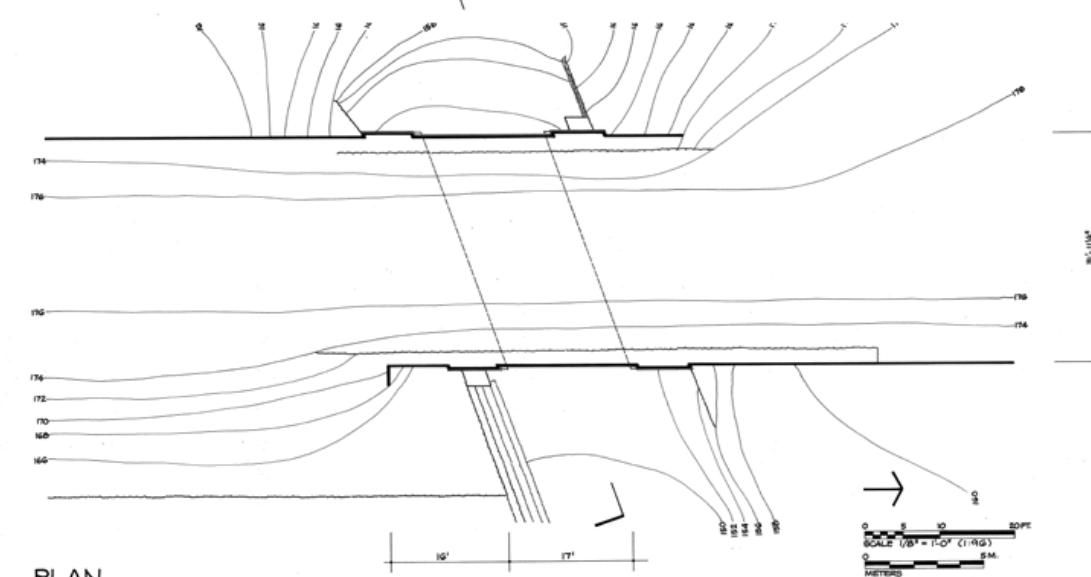
View of the Hudson River and the Palisades, looking west from the lower Quarry Railroad Trail, 2017. PHOTO COURTESY OF CHRISTINA LOMOLINO

### OLD CROTON AQUEDUCT QUARRY RAILROAD BRIDGE 1838-1839



CONSTRUCTION OF THE OLD CROTON AQUEDUCT BEGAN IN 1837 UNDER THE DIRECTION OF CHIEF ENGINEER JOHN B. JERVIS. IN JULY 1842, ALTHOUGH NOT ENTIRELY COMPLETED, THE 41 MILE LONG AQUEDUCT BEGAN DELIVERING WATER TO NEW YORK CITY FROM A REMARKABLY PURE AND ABUNDANT SOURCE - THE CROTON RIVER IN UPPER WESTCHESTER COUNTY, NEW YORK. WHEN FIRST OPENED, THE OLD CROTON WAS ONE OF THE LONGEST MODERN AQUEDUCTS IN THE WORLD, NOTED FOR ITS LENGTH AND CAPACITY. ITS ROUTE OVER A HIGHLY IRREGULAR TERRAIN, AND ITS GREAT EXPENSE INCURRED BY A SINGLE MUNICIPALITY, THE OLD CROTON AQUEDUCT HAS BEEN A SUPERLATIVE EXAMPLE OF AMERICAN CIVIL ENGINEERING PRACTICE IN THE FIRST HALF OF THE NINETEENTH CENTURY.

LOCATED 2 1/2 MILES FROM THE ORIGINAL CROTON DAM, THE QUARRY RAILROAD BRIDGE REPRESENTS AN EXAMPLE OF HOW THE DESIGN OF THE AQUEDUCT HAD TO ACCOMMODATE EXISTING TRANSPORTATION ROUTES. HARVEY'S MARBLE QUARRY HAD BEEN CUTTING STONE PRIOR TO THE CONSTRUCTION OF THE AQUEDUCT THROUGH HASTINGS-ON-HUDSON, BECAUSE THE AQUEDUCT LINE RAN BETWEEN THE QUARRY AND ITS SHIPPING DOCKS ON THE HUDSON. THE CHIEF ENGINEER SPECIFIED A BRIDGE THAT WOULD ALLOW THE CARS LAID WITH HEAVY STONE TO PASS UNDER THE AQUEDUCT. IN A CONTEMPORANEOUS SOURCE, THE BRIDGE WAS DESCRIBED AS HAVING A 18 FT. SPAN AND A HEIGHT OF 10 FT.



Detail of the Old Croton Aqueduct Survey, Historic American Engineering Record (1975). COURTESY OF THE LIBRARY OF CONGRESS



# WELCOME TO Quarry Park

*Hastings-on-Hudson*

**HOURS:** THE PARK IS OPEN FROM DAWN TO DUSK

## PARK RULES

**FOR YOUR SAFETY AND ENJOYMENT  
PLEASE HONOR THE FOLLOWING:**

- ▶ NO DOGS IN THE PARK  
(TO PROTECT PLANTINGS AND WILDLIFE)
- ▶ NO SMOKING
- ▶ NO ALCOHOLIC BEVERAGES
- ▶ NO BICYCLES, SKATEBOARDING OR OTHER RECREATIONAL SPORTS. PLEASE PARK BIKES IN THE RACKS PROVIDED
- ▶ NO MOTORIZED VEHICLES OR DRONES
- ▶ DO NOT CLIMB TREES OR ROCKS
- ▶ DO NOT DISTURB PLANTS, FLOWERS OR WILDLIFE
- ▶ CHILDREN MUST BE SUPERVISED BY AN ADULT
- ▶ ENJOY MUSIC ONLY WITH HEADPHONES
- ▶ NO LITTERING – PLEASE BRING OUT WHAT YOU BRING IN

*Thank you for helping to keep Quarry Park beautiful!*

