



**TOWN OF PHILIPSTOWN**  
**2030 Comprehensive Plan**  
**November 2021**

**Prepared for:**

**Town Board, Town Of Philipstown, 238 Main Street, Cold Spring, NY**

**Richard Shea, Supervisor**

**John Van Tassel, Deputy Supervisor**

**Jason Angell, Town Council**

**Judith Farrell, Town Council**

**Robert Flaherty, Town Council**

**Prepared by: Philipstown Comprehensive Plan Update Committee**

**Nat Prentice, Chair**

**Eric Arnold**

**Joyce Blum**

**Richard Butensky**

**Betsy Calhoun**

**Tara Caroll**

**Sean Conway**

**Katie Cucchiarella**

**Mary Kate Ephraim**

**Ann Hammond**

**Cathy Kopf**

**Lithgow Osborne**

**Greg MacGarva**

**Joe Regele**

**Bob Rhodes**

**Marianne Sullivan**

**Teri Waivada**

**Marc Weiss**

**Heidi Wendel**

**Special thanks to:**

**Retired Town Councilman Mike Leonard**

**Anita Prentice, Editor**

**Jennifer Zwarich, Logo Design**

**Comprehensive Plan Consultant: Bonnie Franson, Nelson Pope and Voorhis, LLC, 156 Route 59, Suite C6 Suffern, NY**

Grant Provider: Hudson River Valley Greenway Communities Council, 625 Broadway, 4th Floor, Albany, NY



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# COMPREHENSIVE PLAN 5/6/2021 DRAFT

## INTRODUCTION

Philipstown's Comprehensive Plan is a framework for the future. The political, social, and environmental shifts that have taken place since the 2006 adoption of our current Comprehensive Plan have impacted our local economy and altered the Town’s planning priorities. In 2017, the Town appointed a Comprehensive Plan Update Committee (CPUC) and this draft reflects their work. **The new Comprehensive Plan sets forth goals, strategies, and action items that will enable Philipstown to navigate these shifts and continue to thrive as a desirable place to live, work, and play for the next 10 years.**

### About Philipstown

The Town of Philipstown is a 51.5 square mile rural historic community in western Putnam County with a population of just under 10,000 people. Our defining and valued attributes are: access to the Hudson River, a sense of history, an extensive parkland and open space network, excellent schools, active nonprofits, two charming villages, a central location in the New York metropolitan region and the Hudson Valley, and a long tradition of community involvement.

The combination of an engaged community dedicated to the preservation of a high quality of life, non-profit institutional expertise, and a proactive local government willing to listen and take action has been an important agent of positive change in the Town. The development of a rare, bi-partisan trust between the private and public sectors over many years has led to a partnership that has positioned Philipstown as a leader in important national issues, including land use, natural resource protection, and climate change mitigation.

The residents of Philipstown continue to responsibly express their ideas about the future of the Town through community information sharing initiatives. These initiatives include a series of 2016 [Community Conversations](#) followed by a Community Survey organized by the Desmond Fish Public Library; a series of public forums organized by the Ecological Citizens Project (ECP), known as the [Philipstown Community Congress](#), leading to a Community Vote in 2017 in which over 750 ballots were cast; and an innovative community inventory of greenhouse gas emissions organized by the ECP and spearheaded by the [Philipstown Climate Smart Communities Task Force in 2019-2020](#).

Acknowledging the need to become a more resilient community in the face of growing climate change concerns, public officials in Philipstown voted to join New York State's Climate Smart Communities initiative in June 2017. Inspired by the actions of our elected officials and the activism of the volunteers involved in [Climate Smart Philipstown](#) and other organizations, including the CPUC, we have emerged as both a national and local leader in the fight against climate change by supporting the goal of reaching 100% community carbon neutrality by 2040. Led by volunteers associated with the ECP and the Climate Smart Philipstown Task Force, who will engage in a neighbor-to-neighbor community-wide engagement project, the Town launched the [Philipstown Fights Dirty](#) campaign on Earth Day 2021. The campaign's goal is to support each resident's effort to reduce his or her metric CO2 emissions by one ton a year for the next 20 years.

The Town of Philipstown also adopted a [Complete Streets](#) policy in February 2020. This approach to mobility planning attempts to ensure that people of all ages and abilities are able to move around their communities safely and easily. We recognize that transportation

infrastructure should accommodate a range of transportation modes such as biking, walking, and driving.

Finally, national events in 2020 spurred an increased commitment by many local organizations to work harder to make Philipstown a place where all residents are treated justly and fairly. Philipstown institutions including schools, libraries, governments, and non-profit organizations have taken actions to make their own operations more committed to social justice and are increasingly working together to achieve the goals of equity, diversity and inclusion.

## Our Community Vision

Although 15 years have passed since the adoption of the 2006 Comprehensive Plan, Philipstown remains remarkably unchanged in many respects. **The Comprehensive Plan sets forth our Community Vision for preserving the Town's strengths and infrastructure and addressing its future needs. It is a policy document that is meant to guide and hold accountable all stakeholders responsible for maintaining a high quality of life in Philipstown. The Plan is dynamic in that the content will be kept current by a participatory and transparent process that provides public input and feedback, similar to the manner in which the Plan was written.**

The fundamental aspects of our Community Vision include:

- **Retaining our Town's bucolic feel, low-density residential character, and peaceful sense of place and connection, with Cold Spring serving as the Town's main center of retail activity and community gathering. This includes adjusting access to visitor sites to prevent overburdening of existing road and trail infrastructure.**
- Recognizing that a healthy 21st century town is a place where all residents can live, shop, congregate, and spend their time in safety and comfort with their civil rights respected.
- Developing a variety of housing types at various price points in locations that have the infrastructure and amenities to support them, while acknowledging that large-scale residential development of any kind faces a myriad of environmental and infrastructure challenges.

- Revitalizing the Town's neighborhoods as more modern, mixed-use communities and establishing policies that will help support our businesses in a changing economy.
- Maintaining a physical space that is aesthetically pleasing and easy to navigate for pedestrians, cyclists and vehicles.
- Building a place that offers services and stores that attract community residents and visitors.
- Achieving the goals/strategies/action items in the Plan through safe and ecologically sound infrastructure and land use management.

In order to preserve these aspects of Philipstown, the Plan combines best practices in sustainable planning with community input to inform policies that will preserve these enviable assets for generations to come, while considering practical key issues that may affect how we achieve specific goals.

### Key Issues:

The issues we face in Philipstown today are at once very similar to and very different from those we faced in 2006. Today, the preservation of the Town's residential character and natural condition is still of utmost importance, as is the protection of its environmental features, especially the quality of our water. Maintenance of valuable municipal infrastructure such as roads and power lines is also critical. And we must meet the housing needs of changing demographics, including seniors, workforce employees, and young families. Meanwhile, a host of new challenges, including those introduced by the COVID-19 pandemic, have appeared over the last 15 years, changing the way land use and community planning must be approached.

We don't yet know if the spike in relocations of people leaving New York City, brought on by the pandemic, will continue after the virus is controlled. We also don't know whether working and schooling from home will become a permanent way of life in Philipstown. But we do know that

consumers choose to shop online rather than in-person with increasing frequency. As a result, e-commerce is transforming the American “downtown” and affecting the actions local businesses must take to remain relevant and successful in this new market. At the same time, as our Millennials’ economic self-sufficiency increases and our Baby Boomers age, these populations are becoming more interested in amenities, housing, and service options that are accessible without a personal vehicle or through public transit. We also recognize a trend toward introducing healthy living and active lifestyles into everyday actions and a “health-in-all-policies” approach to planning.

The pursuit of an active lifestyle coupled with the beauty and majesty of the Hudson Highlands in Philipstown have produced an unexpected challenge to our quality of life in recent years.

Pedestrian safety and crowd management issues have arisen along Route 9D and its tributary roads, as well as in the Villages, brought on by an increase in the number of visitors to certain hiking trails (most notably Breakneck Ridge). The Hudson Highlands Fjord Trail project, which is expected to be completed over the course of this planning period, is designed as a comprehensive congestion-management initiative in response to these challenges, but the expectation of a continued increase in the numbers of visitors will make the evolution of a visitor-management strategy a planning priority for years to come—we want to maximize the economic benefits of tourism without increasing the risk to our public safety or overburdening our infrastructure. The Town is encouraged to work with other jurisdictions and agencies to solve issues like hiker parking, and to review the Town building code to tailor it to new realities.

In addition, even in Philipstown, which is relatively free of crime and security threats, the drug crisis potentially affects all Philipstown families, and must be considered in community planning. As a community, we have recognized the increase in drug abuse, and the Town must continue to work to mitigate it. The [Philipstown Behavioral Health Hub](#) is a key resource that should continue to receive public and private support in its efforts.

Finally, as described above, climate change is a national and global crisis that will be with us for the next 100 years. Philipstown has developed more robust environmental disaster and adaptation plans to combat increasingly frequent and intense weather events. Our increasingly sophisticated and comprehensive understanding of global climate change has also emboldened

Philipstown to take action to curb air emissions, implement sustainability measures in Town operations, and encourage more responsible resident behavior. The recent commitment to zero emissions by 2040 is a strong manifestation of this resolve.

## How a New Comprehensive Plan Was Written

In November 2017, when the Town formed the CPUC, a diverse group of 14 volunteers came together to begin work on a new Plan. A total of 25 residents have worked with the Committee since that time. Early on, we created a [Website](#) asking for community input. In addition we organized two town-wide surveys to continue gathering community feedback. The first was an online survey completed in 2018 and the second, which used a survey template and is described below, was completed in 2020. We had a total of approximately 1,000 responses to our surveys.

In the 2020 survey, the CPUC sought to get an understanding of what the residents wanted to see in the Comprehensive Plan. We promoted the survey in the local newspapers, on social media and municipal websites. We utilized the email lists of our two local libraries, the Climate Smart Philipstown Taskforce, and the Philipstown Trails Committee. We had more than 700 participants. Our topics covered demographics, housing, economic development, recreation, and infrastructure. A few of the questions asked the participants to write in what they loved about the town, to describe their vision for its future, and to identify areas of concern that should be addressed in the next few years. These responses showed an overwhelming love for our great natural beauty and community feel. Top areas of concern included tourist management, traffic, taxes, and infrastructure issues like septic tanks.

We also held two public meetings in late 2018, one in the North Highlands and the other in Continental Village. In 2019, we successfully applied for a Hudson River Valley Greenway grant, which enabled us to gain the perspective of a professional planner in 2020. Throughout our history as a committee, our volunteers met individually with as many elected and appointed officials, representatives of Town Departments and institutional stakeholders as possible. Two members of the Town Board attended our meetings as ex-officio members, and we regularly updated the Town Board about our activities at public meetings.

Following the initial submission of a draft of the new Comprehensive Plan to the Town Board in December 2020, and in accordance with Section 272-A of NYS Municipal Law, the CPUC co-hosted with the Desmond Fish Public Library a series of three virtual public meetings on March 1 and March 6, 2021 for the purpose of providing the residents of the Town an opportunity to hear about and ask questions about the new draft Plan. Members of the CPUC provided a summary of the Goals section of the Plan. A total of approximately 100 people participated in these meetings, and [the feedback gathered in the process was incorporated into this revised draft of the new Comprehensive Plan.](#)

On March 23, 2021, the Cold Spring Chamber of Commerce hosted an open meeting to provide an opportunity for representatives of local businesses to review and ask questions about the Economic Development Goals contained in the new Comprehensive Plan. Members of the CPUC provided a summary of these Goals and approximately 40 people participated in this meeting.

At 7:00PM before its regular monthly meeting on August 5, 2021, in accordance with Section 272-A of NYS Municipal Law, the Town Board of Philipstown held a Public Hearing for the purpose of providing an opportunity for any resident of the Town to comment on the proposed new Comprehensive Plan. 3 residents made comments at this time and their comments were considered in revising the draft of the new Comprehensive Plan. The Public Hearing was continued by the Town Board at 7:00PM on September 2, 2021 before its regular monthly meeting. Since no resident had any comments to make, the Town Board closed the Public Hearing on the new Comprehensive Plan.

### How the Comprehensive Plan is Structured

This Plan is founded on the desire for Philipstown to be a sustainable community. Because sustainability is something that is long lasting and can withstand time, it intrinsically recognizes that there is a relationship between the social, environmental and economic aspects of the community. The Committee recognized the interrelationship of the "silos" that were identified in the 2006 Comprehensive Plan. Seeking a unifying structure for the new Plan, the CPUC determined that the American Planning Association Comprehensive Plan Standards and Best Practices provided the most complete sustainability framework. This framework positions the

Comprehensive Plan in a manner that aligns with Federal, State and regional planning objectives.

In addition to presenting goals and strategies, the Plan also identifies the action items that should be implemented to achieve each of the goals. These action items should be incorporated into the Town's annual planning and budget process. As part of its budget submission, the Town Board should receive recommendations associated with the action items outlined in the Plan and be given the opportunity to review and budget for those specific actions that it deems a priority for implementation during the following year. The action items are the elements of this Plan that will change more frequently over time and will be revisited in association with the Town's yearly budget process.

In addition to the annual review process outlined above and in accordance with Section 272-A of NYS Municipal Law, the Town Board of Philipstown shall provide as a condition of the adoption of this Comprehensive Plan that the maximum interval at which the Plan will be reviewed is 10 years.

The Comprehensive Plan adopts a multi-disciplinary approach that recognizes the interwoven complexity of the world in which we live. The Plan's thirteen Goals embrace the six planning principles used by the APA. These principles are:

## **1. Livable Built Environment**

Ensure that all elements of the built environment, including land use, transportation, housing, energy, and infrastructure, work together to provide sustainable, green places for living, working, and recreation, with a high quality of life.

[GOAL 1: SUSTAIN OUR RURAL AND HISTORIC CHARACTER](#)

[GOAL 2: PROVIDE A WIDE RANGE OF HOUSING](#)

[GOAL 3: DEVELOP AN INTEGRATED TRANSPORTATION PLAN](#)

[GOAL 4: EMBRACE "SMART GROWTH" PLANNING PRINCIPLES](#)

## 2. Harmony with Nature

Ensure that the contributions of natural resources to human well-being are explicitly recognized and valued and that maintaining their health is a primary objective.

[GOAL 5: PROTECT OUR NATURAL RESOURCES](#)

## 3. Resilient Economy

Ensure that the community is prepared to deal with both positive and negative changes in its economic health and to initiate sustainable development and redevelopment strategies that foster green business growth and build reliance on local assets.

[GOAL 6: SEEK A FAIR AND BALANCED TAX STRATEGY](#)

[GOAL 7: PURSUE A SUSTAINABLE ECONOMIC DEVELOPMENT STRATEGY](#)

[GOAL 8: PROMOTE THE CONTINUED USE OF AGRICULTURAL LAND FOR FARMING](#)

## 4. Healthy Community

Ensure that public health needs are recognized and addressed through provisions for healthy foods, physical activity, access to recreation, health care, environmental justice and safe neighborhoods.

[GOAL 9: STRENGTHEN OUR TOWN-WIDE SENSE OF COMMUNITY](#)

[GOAL 10: EXPAND OUR RECREATIONAL OPPORTUNITIES](#)

[GOAL 11: ENSURE THAT RESIDENTS CAN ENJOY GOOD HEALTH](#)

## 5. Responsible Regionalism

Ensure that all local proposals account for, connect with and support the plans of adjacent jurisdictions and the surrounding region.

[GOAL 12: PURSUE PARTNERSHIPS WITH NEIGHBORING MUNICIPALITIES](#)

## 6. Interwoven Equity

Ensure fairness and equity in providing for the housing, services, health, safety and livelihood needs of all citizens and groups, and actively discourage discriminatory practices—particularly with regard to economic development and opportunity, schooling and land use or development.

Applies to all Goals.

[GOAL 13: ENSURE THAT THE LAWS OF THE TOWN AND THE GOALS OF THE COMPREHENSIVE PLAN ARE CONSISTENT](#)



# Planning Principle I: Livable Built Environment

## GOAL 1: SUSTAIN OUR RURAL AND HISTORIC CHARACTER

Preserving our community character in a sustainable way is the overarching theme of the Comprehensive Plan. Philipstown is a unique place characterized by great natural beauty, historic places, and a sense of small-town community. This uniqueness is fragile and could be lost through a rapid influx of development. The existence of open space is critical to maintaining our unique character. Development should be done in a way that is sensitive to the Town's special nature. The long term sustainability, resilience, and safety of the town and health of its residents should be considered in every action taken.

Strategy I. Encourage development in areas designated for future growth.

### *ACTION ITEMS:*

1. Provide incentives to developers for voluntary density reductions.
2. Practice "conservation development," or clustering, where appropriate; promoting connectivity of open spaces and avoiding fragmentation. Ensure that conservation development does not lead to a more negative environmental impact than would occur under conventional development.
3. Require that development is in scale and in character with its surroundings and lot size.
4. Require that new rural roads be compatible with the existing road system. In particular, new roads off of dirt roads should be in character with the surroundings.
5. Encourage institutional uses that fit the character of the community, and maintain good zoning control over those uses.

Strategy II. Preserve elements that contribute to Philipstown’s rural and historic character — dirt roads; stone walls; historic structures, sites and areas; significant trees, ridgelines, farmland, and forests; the Hudson River shoreline and scenic viewsheds.

*ACTION ITEMS:*

6. Preserve the character of historic dirt roads. Use techniques and materials in maintaining these roads that enhance their safety, aesthetics, resilience and regeneration, without adversely impacting the environment.
7. Preserve our stone walls, historic structures and large trees, and require consideration of these in the building permit process.
8. Prevent overburdening of the Town’s infrastructure by visitors. Provide alternative access to visitor attractions that does not infringe on residents’ safety and privacy.
9. Conduct a town-wide inventory of historic structures and sites and examine methods for their continued protection.
10. Form a town-wide Tree Advisory Committee whose mission would be to educate the residents of the town on best practices for the maintenance of historic trees.

Strategy III. Commit to achieving community carbon neutrality by 2040.

*ACTION ITEMS:*

11. Initiate changes to existing regulations that will help achieve community carbon neutrality.
12. Incorporate recommendations made in the [Philipstown 2020 Greenhouse Gas \(GHG\) Inventory Report](#) in all policies.
13. Amend building code to mandate the use of renewable energy for primary heating sources on new construction or renovations.
14. Establish sites for electric car charging and mandate car charging stations for new developments based on the number of parking spaces.
15. Support the [Philipstown Fights Dirty](#) neighbor-to-neighbor campaign to help residents reduce their metric CO2 emissions sponsored by the ECP and the Climate Smart Philipstown Task Force volunteers.

16. Develop a Philipstown solar energy policy, along the lines recommended by [Scenic Hudson's How to Solar Now](#) blueprint for communities.

## GOAL 2: PROVIDE A WIDE RANGE OF HOUSING

There is a chronic need for a wide range of housing solutions in Philipstown. Our quality of life relies on affordable housing and access to a diversified economy within the Town. Residents who work in the community strengthen Philipstown's small-town character. This character is threatened by escalating housing costs. Creative solutions for securing a range of housing that fits the community character for a variety of income levels should be pursued, and home-based businesses providing a range of services should be encouraged.

Strategy: Increase the availability of mixed-priced rental and ownership housing with appropriate controls on their location and impact.

### *ACTION ITEMS:*

1. Create an inventory of developable land to understand what housing might be added in Philipstown and how that would be affected by zoning.
2. Encourage the development of Accessory Dwelling Units (ADUs), allowed by right, to increase the stock of smaller-scale housing units.
3. Encourage two-family and three-family housing with appropriate controls on location and impact.
4. Encourage multi-family housing near mixed-use centers or as an adaptive re-use of existing structures on Institutional properties.
5. Encourage a mixture of housing types and require mixed-priced housing in new developments over a set size threshold.
6. Encourage mixed-use development where housing is mixed with commercial uses.
7. Encourage multi-family housing that serves local needs where a unique opportunity exists to replace an undesirable use.
8. Explore the incorporation of "co-housing" and "co-living" developments to provide more housing alternatives.

9. Encourage senior housing that addresses local and regional income levels and needs, and is in keeping with the scale of Philipstown and the goals of this Plan.
10. Provide incentives and/or requirements for the permanent dedication of units as affordable housing.
11. Partner with and promote awareness of existing non-profits working to increase affordable housing in the county and in the region.
12. Incentivize landlords who convert (and maintain) existing rental units to permanent affordable housing through state programs.
13. “Workshop” redevelopment alternatives with large institutional property owners to pre-approve concepts that are in keeping with the goals of this Plan.
14. Encourage the rehabilitation of older, seasonal housing units (and related septic and utility systems), to increase permanent, year-round housing.
15. Explore policies related to short-term rentals to prevent the loss of a diverse housing stock.
16. Expand upon the current New York State housing non-discrimination ordinance locally to cover two-family, owner-occupied housing.

## GOAL 3: DEVELOP AN INTEGRATED TRANSPORTATION PLAN

Philipstown’s transportation plan should embrace the mobility planning principles of its [Complete Streets](#) policy and seek to reduce our reliance on motor vehicles.

Strategy: Update the Town’s transportation infrastructure to address safety, health, environmental concerns, traffic congestion, quality of life, and accessibility issues for residents of all ages.

### *ACTION ITEMS:*

1. Ensure that planning for new roads and the maintenance and repairs of existing roads are evaluated within the framework of our Complete Streets policy by creating a review process for the integration of this policy into road design and maintenance plans.

2. Support the adoption of a Complete Streets policy for Putnam County.
3. Create new bike paths/lanes, walking trails, and sidewalks to link important community spaces such as schools, libraries, the Philipstown Recreation Center, Cold Spring, and the Garrison Landing with parking areas.
4. In coordination with the villages of Cold Spring and Nelsonville, develop an Active Transportation Master Plan to guide strategic development of walking and biking infrastructure and amenities.
5. Establish a hiking link to Constitution Marsh from Boscobel and the Cold Spring Metro North Train Station. Consider augmenting the existing raised walkways to provide a scenic hiking access to these sites.
6. Ensure that biking and walking options are safe for people of all ages.
7. Proactively engage with neighboring municipalities to expand public transportation for both residents and tourists. (For example, Philipstown could explore a collaboration with Highland Falls, which has proposed the development of a riverfront park. A collaboration could lead to the establishment of a water taxi that could connect West Point, Garrison's Landing and Cold Spring, thus encouraging the movement of people around the three areas without the burden of more road traffic and a need for parking.)
8. Work with Putnam County and New York State to improve road conditions and safety on key roadways in Philipstown, reduce motor vehicle fatalities and severe injuries, and improve pedestrian safety.
9. Use modern design elements to promote safety (traffic calming, road diets, raised crosswalks, medians), aesthetics (plantings, medians) and access (curb cuts, safe biking and walking paths) where possible.
10. Explore public/private partnership funding options for public transportation.
11. Form an advisory group to examine transportation to medical appointments and services for seniors and other residents with mobility restrictions.
12. Work with Putnam County and New York State to plan for appropriate road improvements along Route 9D to develop safe, off-road bike paths.
13. Develop a Philipstown link to the Greenway Trail and the Northern Putnam Trail.
14. Maintain the existing horse trail network and consider additional horse trails where appropriate.

15. Request and review New York State Department of Transportation traffic studies post-pandemic, once normal volume resumes, to identify safety issues, especially considering daily commuter traffic on Route 9 and Route 9D, local use patterns, and issues from curb cuts for ingress and egress traffic.
16. Recommend needed upgrades and assess traffic conditions on developable vacant sites that are zoned for commercial activities, and determine where additional parking could be created.

## GOAL 4: EMBRACE "SMART GROWTH" PLANNING

### PRINCIPLES

New development should be located only where it can be supported by existing infrastructure, and new infrastructure should be developed only where it supports the Town's development and conservation goals. Philipstown should continue to promote smart growth principles in its land use policies. At the core of the Town's character is growth and development that so far has remained within the scale of the community.

Strategy: Direct development to areas where it can be reasonably supported.

#### *ACTION ITEMS:*

1. Concentrate new commercial and industrial development in designated mixed-use or industrial areas.
2. Locate denser development adjacent to existing areas of settlement.
3. With active local community involvement, study appropriate areas for new mixed-use development, explore use of central sewer and water where appropriate, and consider developing master plans that balance community character and development potential, while avoiding landscape fragmentation.
4. Anticipate redevelopment, adaptive re-use, and mixed income housing opportunities in discussions with owners of institutional properties, large tracts of land, and old industrial

sites. Encourage the involvement of open space preservation and land conservation organizations in these discussions.

5. Allow denser mixed- use development areas that can become community hubs, creating more pedestrian- oriented environments.

## Planning Principle II: Harmony With Nature

### GOAL 5: PROTECT OUR NATURAL RESOURCES

The Town's natural resources, which require ongoing protection, are its green infrastructure and water sources contributing to public health, habitat, recreation, and community character. As called for in the 2006 Comprehensive Plan, the Town adopted a Natural Resources Protection Plan (NRPP) in 2007. In 2020, the Climate Smart Philipstown Task Force updated the Natural Resource Inventory (NRI) that formed a basis for the NRPP. In addition, the Town adopted an updated Open Space Index (OSI) in 2016 to update the maps in the NRPP. With the adoption of the NRPP and the OSI (and the fact that over half of the town is protected as state park land or by conservation organizations), Philipstown is in a strong position to protect its natural resources. However, landscape fragmentation, whereby development patterns create gaps in open space corridors, results in detrimental consequences for wildlife and continues to pose a threat.

#### Strategy I. Protect water quality and quantity.

#### *ACTION ITEMS*

1. Monitor and protect aquifers, recharge areas and stream corridors.
2. Protect existing wetlands/wetland buffers to help mitigate the impact of climate change (increase in large storm events and associated flooding).
3. Develop a program for septic system maintenance, remediation and education measures to minimize risk of surface and groundwater contamination.

4. **Protect the quality of our water supply by identifying areas most critical to the water supply and ensuring that land use practices do not threaten water quality and quantity.**
5. Implement best practices for road de-icing in winter to minimize adverse impacts on our water resources; use less salt.
6. Develop a watershed coalition for Foundry Brook and Clove Creek that will monitor water quality.
7. Support New York City in its efforts to avoid filtration of Catskill water supply serving Continental Village.
8. Update Town-wide water resource studies every 5-10 years.

## Strategy II. Identify critical parcels of land for preservation.

### *ACTION ITEMS*

9. Continue to implement the recommendations of the NRPP through land use regulations and other measures.
10. Update the Open Space Index (OSI) every 5-10 years, and add a focus on connectivity of open spaces.
11. Supplement the OSI with an index of properties critical to key drinking water resources, namely, the Clove Creek Aquifer and Foundry Brook.
12. Educate residents and commercial owners about protecting the natural resources on their properties.
13. Provide ongoing training to all town board and volunteer board members on how to protect natural resources in the development approval process.
14. Create a [Community Preservation Plan](#) to update the NRPP using the most recent NRI and OSI and appoint an advisory board to oversee the implementation of this Plan.
15. Explore and establish sustainable sources of funding to carry out the Community Preservation Plan.

## Strategy III. Prevent landscape fragmentation.

### *ACTION ITEMS*

16. Preserve habitat and scenic resources.
17. Encourage use of conservation development (clustering) through the Town building code.

18. Clarify regulations around open space development and amend conservation subdivision rules to better protect natural resources.
19. Continue to assess and identify areas that may have high habitat value for biodiversity.

#### Strategy IV. Facilitate the community's enjoyment of the Hudson River.

##### *ACTION ITEMS*

20. Encourage access to and use of the riverfront and its tributaries. Explore the Scenic Hudson Guide, [\*Revitalizing Hudson Riverfronts\*](#), recommended when considering the promotion and development of waterfront areas that seek to serve the needs of both local people and tourists and to conserve the surrounding natural resources. (A successful example of the application of the Scenic Hudson guidelines is West Point Foundry Preserve, where locals and tourists can enjoy walking along the Cold Spring riverfront, but also have access to a green area that provides safe access for all ages, including wayfinding signs, gravel and dirt trails, picnic areas, handicapped parking, bathrooms and a system for waste management.)
21. Safeguard and enhance the habitat of the river and its tributaries through formation of watershed coalitions.

#### Strategy V. Protect environmentally sensitive areas identified in the NRPP.

##### *ACTION ITEMS:*

22. These areas include, but are not limited to: Garrison Golf Club, Cold Spring Reservoir and Foundry Brook, Scofield Ridge, large contiguous forest blocks (i.e. matrix forest), the Hudson River shoreline, Constitution Marsh, brooks, wetlands and riparian buffer zone, ridgelines and steep slope, and corridors between already protected lands. Other areas may be identified through a Community Preservation Plan.

## Strategy VI. Develop strategies to protect against environmentally hazardous materials

### *ACTION ITEMS*

23. Work with county, state and federal agencies to identify hazardous materials and safeguards against them.
24. Identify sites that may be a source of contaminants into key waterbodies and implement sampling, testing and mitigation protocols through the watershed coalitions.

## Strategy VII. Encourage sustainable commercial and residential construction practices.

### *ACTION ITEMS:*

25. Sustainability practices include: water conservation, recycling programs, renewable energy applications, incorporation of materials with longer life versus use of biodegradable materials, efficient use of lighting, reduction of impervious surface area, and adoption of new waste treatment methods to reduce the impact of current septic requirements on the landscape.

## Planning Principle III: Resilient Economy

### GOAL 6: SEEK A FAIR AND BALANCED TAX STRATEGY

The Town should continue to look for opportunities to increase tax revenues, explore shared services, and address the variability of school taxes among the residents of the Town. Our taxes are lower than neighboring municipalities in the Lower Hudson Valley. Maintaining these rates is helpful in retaining current taxpayers and attracting new residents and businesses to Philipstown.

The issue of development versus land preservation, and the impact of each on property taxes and municipal services costs, is an area of concern. However, there is a strong consensus that making decisions based on fiscal impact alone will result in plans that dilute the special character that is the town's core value.

The school tax situation is complex. Philipstown residents are currently located in one of four school districts. Tax rates vary significantly between the districts; the end result is that taxpayers with equal assessments who live in different school districts within Philipstown have total property tax bills that vary a great deal.

#### Strategy I. Increase local tax revenues.

#### *ACTION ITEMS*

1. Maximize tax revenues by attracting commercial development in locations with suitable infrastructure. All conversations about potential new development must consider retaining Philipstown's unique character.
2. Weigh the benefit of potential development for increasing the Town's tax base against the cost of providing additional services to new homes and businesses. To be considered beneficial, the tax revenues associated with the development, net of costs to the Town

resulting from the development and subsequent operation and maintenance of the site, should exceed the net tax revenues from the site prior to being developed.

## Strategy II. Explore shared services.

### *ACTION ITEMS*

3. Reduce the cost of providing municipal services through budget cuts achieved by implementing efficiencies and exploring shared service opportunities with neighboring municipalities.
4. Explore the formation of districts as a potential means for delivering services to residents and maintaining public facilities in a cost-effective manner.

## Strategy III. Address the variability of school taxes.

### *ACTION ITEMS*

5. Encourage the formation of a citizen task force to examine school tax issues, including reassessment strategies and state-level initiatives. The latter could include, for example, creating an additional level of STAR, which reimburses residents who pay significantly higher taxes than the rest of the town.
6. Recommend that the elected officials of the Town, Villages and School Districts and any other taxing entities meet to discuss shared concerns and needs, including discussions about innovative ways to cross traditional boundary lines to deliver improved services so that all Philipstown students—regardless of the district in which they reside—are able to access and benefit from the educational and recreational opportunities that fit their skills, abilities and interests.

## GOAL 7: PURSUE A SUSTAINABLE ECONOMIC DEVELOPMENT STRATEGY

Identify the type and location of commercial activity that is desirable in Philipstown. Existing businesses provide a range of products, services and employment to the town and region. They also play a major role in shaping our special small-town character.

New commercial development should be consistent with the town's aesthetic and qualitative goals, while contributing to a strong economy. In addition, technology is creating a new group of workers who can work and tele-commute from their homes. Developing specific guidelines for managing connectivity infrastructure will make it easier for appropriate businesses and home offices to locate in Philipstown.

### Strategy I. Attract commercial activity that is consistent with Town values.

#### *ACTION ITEMS:*

1. Encourage home-based businesses consistent with the zoning code, provide safe parking for employees or clients, and assess the impact on adjacent properties.
2. Recognize the importance of nonprofits and religious organizations because of their affinity with the town and their contributions to the town's quality of life.
3. Discourage national franchises.
4. Encourage experienced regional business owners with a limited number of other locations wishing to expand into Philipstown.

### Strategy II. Accommodate commercial activity in designated areas.

5. Locate commercial activity in locations that complement the town's traffic patterns, community interests and design guidelines.
6. Concentrate retail development at high traffic hubs and in numbers that can be supported by local demand.
7. Discourage "big box" architecture, strip commercial development and "urban sprawl" in general.

8. Encourage hamlet-type development that provides opportunities for local businesses to locate near each other.

### Strategy III. Develop spaces for growing small and medium-sized businesses.

#### *ACTION ITEMS:*

9. Create small-scale mixed-use village-type centers where local businesses can locate and thrive.
10. Encourage development of professional office/commercial space, in keeping with the scale of Philipstown and the goals of this plan, to decrease commuting time for local workers, and stimulate the day-time economy in Philipstown.

### Strategy IV. Improve the character of development on Route 9.

#### *ACTION ITEMS:*

11. Focus on managing safe ingress and egress at mixed-use hubs such as the Philipstown Square area or other appropriate locations.
12. Improve traffic light and safety at the intersection of Route 9 and Fishkill Road, as well as Route 9 and Snake Hill Road.
13. Adopt further design guidelines for signage and site improvements.
14. Provide adequate buffers between commercial and residential districts.
15. Apply aquifer protection guidelines and remove invasive species.
16. Prohibit noisy and obtrusive uses.
17. Prohibit additional soil mining.
18. Encourage the maintenance and landscaping of unoccupied or abandoned structures.

## GOAL 8: PROMOTE THE CONTINUED USE OF AGRICULTURAL LAND FOR FARMING

Farming has been an important part of Philipstown’s history. [Glynwood](#), a leading institution in farming development and education, is headquartered here. The Town should promote the conservation and development of local food systems.

Strategy: Support agriculture in Philipstown.

### *ACTION ITEMS:*

1. Create an inventory of all current “agricultural” ventures, large and small.
2. Continually reference and update previous resources such as [Keep Putnam Farming](#) and work with partners at the County level to mutually share information to ensure a holistic view of food production in Philipstown.
3. Educate the community about the preservation of open spaces as fields rather than lawns.
4. Promote the incorporation of “food forests” into land management plans.
5. Encourage small-scale food production and educate the residents about good farming practices.
6. Provide a Town-wide compost area and educate the residents on using it.
7. Identify land access opportunities within Philipstown for new and beginning farmers, encourage underrepresented communities within agriculture, such as BIPOC, LGBTQ+, and women farmers. List these opportunities on local land reparations maps, such as [www.soulfirefarm.org](http://www.soulfirefarm.org).

# Planning Principle IV: Healthy Community

## GOAL 9: STRENGTHEN OUR TOWN-WIDE SENSE OF COMMUNITY

Philipstown's communities are separated by our mountainous geography and municipal boundaries, which can isolate residents from each other. A Philipstown in which people can connect with each other will be a stronger, healthier community.

Strategy: Enable people to connect with one another so that Philipstown retains its small-town character and tradition of volunteerism.

### *ACTION ITEMS:*

1. Enhance the Town's website and add streaming capability to the meetings of the Town's various Boards.
2. Provide improved Town Hall and Community Center facilities (youth, senior, administrative, recreation) which will help bring together residents from various parts of the Town.
3. Explore further cooperation among school districts and/or the possibility of creating a unified Philipstown school district that serves residents in Garrison, Cold Spring, Nelsonville, North Highlands, and Continental Village.
4. Encourage the Town, the Village of Nelsonville, and the Village of Cold Spring to consider consolidation of jurisdictions to increase community cohesion, and provide more equitable representation and distribution of services.
5. Encourage the provision of additional health care facilities.
6. Enhance the use of the Town's television channel to share programs and information.
7. Maintain the volunteer fire and ambulance corps, and explore further cooperation between the emergency services, considering human resource and capital needs.
8. Support several town-wide events each year and maintain a town-wide calendar of events, including multigenerational activities.

9. Support the public libraries in Philipstown as they provide foundational programs and services that support the high quality of life we enjoy. Encourage them to serve as citizens' forums to sponsor programs, discussion and education.
10. Actively promote and support diversity. Increasing representation should be a primary consideration when appointing members to Board positions. Discourage appointed and elected officials from enacting policies and decisions that directly or indirectly discriminate against business owners and residents of any race, creed, color, orientation, or religion. **To achieve these goals, the Town Board should consult with a community-based advisory committee to build awareness and provide guidance on policy choices. The Town Government should adopt a diversity and inclusion program with training, and ensure that job postings reach the broadest applicant pool possible.**
11. Translate the Town website and online resources into Spanish.

## GOAL 10: EXPAND OUR RECREATIONAL OPPORTUNITIES

Expand the Town's capacity to meet current and future demand for recreation, while providing a wide range of activities serving all ages at an affordable cost. Recreation pulls different segments of the community together and encourages people of all ages to improve their health and well-being.

### Strategy I. Offer a wide variety of Recreation Department programs.

#### *ACTION ITEMS:*

1. Educate the public about Town recreational offerings and the offerings of other local recreation providers.
2. Balance specialty programming that is tailored to the needs of particular groups such as teens and senior citizens with intergenerational activities that permit residents of different age groups to share experiences.
3. Develop and implement a cooperative recreation plan with all interested parties, linking it to other Town programs and regulations.

- a. identify opportunities to develop partnerships with schools to increase youth physical activity and encourage use of other facilities owned by schools and nonprofits
  - b. encourage the use of facilities owned by schools and nonprofits to increase opportunities for physical activity and recreation across all age groups
4. Explore opportunities to develop expanded recreational activities through municipal, private, and non-profit development projects.
  5. Explore the full range of options for funding recreational properties and improve the Town's ability to apply for grant funding for recreational programming and infrastructure.
  6. Identify possible sites for new Town recreational facilities that could also serve as a focal point for the community. Residents have indicated a strong interest in a swimming pool and a synthetic surfaced athletic field with lights.

7. Golf ANYONE??????

## Strategy II. Consider designating land for hunting.

### *ACTION ITEMS*

8. Work with the New York State Department of Environmental Conservation and Office of Parks, Recreation and Historic Preservation to enhance local hunting opportunities, including on state owned land.

## Strategy III. Facilitate visual and physical access to the Hudson River.

### *ACTION ITEMS*

9. Improve riverfront and tributary access. Make use of Scenic Hudson's [Revitalizing Hudson Riverfronts](#), a guide to the promotion and development of Riverfront plans.
10. Support the [Hudson Highlands Fjord Trail Project](#) and remain engaged in discussions around Fjord Trail mapping, design and implementation. Consider hiring a planning consultant to represent the Village and the Town in these discussions. Create connections from the Fjord Trail to key Village and Town locations and ensure that there is adequate parking. Increase the number of public restrooms.

# GOAL 11: ENSURE THAT RESIDENTS ENJOY GOOD HEALTH

A 2017 New York State directive calls on Philipstown to embrace a “health across all policies” initiative, which calls for incorporating health considerations into policies, programs, and initiatives led by non-health agencies. Our health is shaped by the community in which we live. In the past, health concerns were not explicitly integrated into the planning process.

## Strategy I. Recognize the health needs of specific age groups.

### *ACTION ITEMS:*

1. Promote supportive environments for parents with infants and young children by expanding access to high quality parent support and early learning opportunities.
2. Collaborate with school districts and community organizations to support positive youth development by providing a wide range of recreational, enrichment and skill-building programs for youth at low or no cost.
3. Use zoning restrictions and other approaches to restrict youth access to tobacco, e-cigs/vape products, alcohol, and associated advertising (e.g. Town could prohibit tobacco advertising or sales within a certain radius of schools); adopt a smoke-free air law for Philipstown that includes vape products, prohibiting smoking in parks, playgrounds, and on town buildings and grounds.
4. Collaborate with other government and social service agencies to prevent youth access to illegal drugs and continue to support the efforts of the [Philipstown Behavioral Health Hub](#).
5. Address the needs of seniors across multiple domains including housing, transportation, social inclusion, and social and health services.
6. Recognize opportunities for intergenerational activities, events, and hiking on [universal trails](#).

## Strategy II. Promote active lifestyles.

### *ACTION ITEMS:*

7. Ensure that parks and recreational spaces address needs across all age groups and abilities.
8. Support the development of biking and walking paths as a way to promote physical activity.
9. Support access to affordable recreational activities for residents of all ages.
10. Explore partnerships with school districts to allow access to district recreation facilities for low or no cost.

## Strategy III. Support healthy foods and prevent food insecurity.

### *ACTION ITEMS:*

11. Support access to affordable healthy foods by supporting and developing local food systems. Engage with partners such as [Putnam Food Systems Coalition](#), the [Hudson Valley Food Systems Coalition](#), and the Glynwood Center, to ensure local efforts are nested within regional strategies.
12. Support community garden concepts and home grown food production.
13. Work with community-based agencies/organizations to address food insecurity/hunger, with an emphasis on seeking out solutions to food insecurity that both promote food sovereignty and support local agriculture (such as the [Food Sovereignty Fund](#)).

## Strategy IV. Promote environmental health.

### *ACTION ITEMS:*

14. Support initiatives that reduce air pollution (non-motorized transport, public transport and solar energy).
15. Develop and implement strategies to reduce solid waste disposal including incentivizing recycling and composting.
16. Preserve and protect drinking water resources. Protect surface and groundwater from overuse of salt on roadways by exploring more environmentally friendly options. Limit

use of pesticides on roadways and near waterways where possible. Use biopesticides/non-toxic pesticides.

17. Plan for public health issues associated with climate change including increasing frequency and intensity of natural disasters such as hurricanes, severe snow/ice storms, flooding and extreme heat events; in particular plan for the needs of sensitive populations including infants and the elderly (for example, providing and publicizing cooling centers during extreme heat events).

### Strategy V. Provide access to healthcare and social services.

#### *ACTION ITEMS:*

18. Promote improved access to physical health, mental health and social services for residents of all ages.
19. Partner with local, state and federal agencies to prevent drug and alcohol use and abuse.

## Planning Principle V: Responsible Regionalism

### GOAL 12. PURSUE PARTNERSHIPS WITH NEIGHBORING MUNICIPALITIES

Philipstown's recreation opportunities, restaurants, local businesses, and arts and cultural institutions attract visitors and generate income for our local retail and hospitality service providers. A policy of responsible regionalism can foster cooperation in the management of the increasing number of visitors to Philipstown and provide guidance on climate change mitigation, connectivity and technology issues. Visitor management, a complicated issue involving several New York State agencies, local governments, and other private and public entities--some of which have conflicting missions and limited resources--has become a planning priority.

**Strategy I. Ensure that tourism and tourism-related businesses do not threaten the character of the town or the safety and privacy of its residents.**

#### *ACTION ITEMS:*

1. Encourage cooperation between all municipalities and institutions involved.
2. Limit parking at points of interest within the Town's jurisdiction.
3. Educate the public about the use of outdoor attractions.
4. Study existing parking areas and determine if they can be utilized to service popular destinations where parking is limited.

Strategy II. Form a Regional Advisory Committee to provide guidance to the Town on issues such as climate change mitigation, connectivity and technology.

***ACTION ITEMS:***

5. Form a Committee Including residents of Philipstown and other towns in Putnam County, as well as representatives from other communities in the Mid Hudson region.
6. Address telecommunications and future connectivity issues such as improved fiber-optics, cell tower locations and appearances, and the introduction of 5G technology.
7. Address climate change mitigation and future power generation requirements.
8. Address the impact, management and integration of technological innovation in our daily lives.

## Planning Principle VI: Interwoven Equity

Note: The principle of interwoven equity applies to all thirteen goals of this plan.

### GOAL 13: ENSURE THAT THE LAWS OF THE TOWN AND THE GOALS OF THE COMPREHENSIVE PLAN ARE CONSISTENT

Update Philipstown's laws to ensure that they are consistent with the goals of the Comprehensive Plan. The laws of Philipstown should be consistent with the town's goals and clear enough that supporters of development find it easy to navigate the planning process.

Strategy I: Create consistency and harmony between our Town's laws and the Comprehensive Plan.

#### *ACTION ITEMS:*

1. Enforce existing regulations. **EXCEPT TENT PERMITS?**
2. Provide the best available technology to all those who are involved in the planning process.
3. Update the zoning code to ensure that it is consistent with the goals of the Comprehensive Plan, understandable, and easy to administer.
4. Review environmental, architectural and sanitary standards as they apply to Manitou, Lake Valhalla, and Continental Village, and other places where non--conforming lots create special circumstances.
5. Explore a referendum option in the Town code.

Strategy II: Maintain a standing committee to oversee the implementation of the action items outlined in the Comprehensive Plan.

*ACTION ITEMS:*

6. Conduct annual planning “charrettes” with public input, to address new challenges and opportunities as they arise. Ensure these are timed to achieve public input during the annual review of the action items for priority.
7. Conduct annual reviews in conjunction with the Town’s budget planning process to select and recommend action items for priority in the next year.
8. For those action items selected as a priority, consider the need for a means of measurement to track their progress to completion. If required, facilitate the development of measures.
9. Consider/recommend synergy opportunities among visitor sites, local businesses and/or other municipalities which may facilitate accomplishment of selected action items.

From Howard Davis

**COMMENTS**

**ON GROUNDWATER AND WELL WATER SUPPLY ISSUES**

**PRESENTED IN THE EXPANDED ENVIRONMENTAL ASSESSMENT FORM (EAF)  
FOR THE PROPOSED HUDSON VALLEY SHAKESPEARE FESTIVAL**

**Prepared by  
Andrew Michalski, PhD, PG, CGW**

**RECEIVED**  
**FEB 17 2022**

I have reviewed the Expanded Environmental Assessment Form (EAF) for the proposed Hudson Valley Shakespeare Festival dated September 2021 and a subsequent revision of this document dated October 2021. Material flaws in the EAF's hydrogeologic methodology and its inappropriate reliance on certain testing data lead me to conclude that the proposed development would create a significant risk of adverse environmental impacts to groundwater both on and off the HVSF site.

### Hydrogeologic Setting

The bedrock at the project site consists of granite and gneiss of the Precambrian age. These crystalline rocks are folded and faulted and form a series of north-east trending ridges and valleys. The consolidated rocks are overlain by a veneer of unconsolidated deposits which range in thickness from a few feet on slopes and hilltops to more than 100 feet in some of the larger valleys outside the project site.

According to Grossman (1957)<sup>1</sup>, yields of wells (average depth of 145 ft) drilled into this crystalline bedrock average 11 gallons per minute (gpm) and range from zero (0) to 120 gpm (Table 8 of Grossman, 1957). The yield depends on several major factors, including the occurrence, spacing and continuity of bedrock fractures and joints; the thickness and character of overlying deposits, and the topographic position of bedrock wells (hilltop, slope or valley). There are two well-developed sets of joints in the area: One set strikes northeast, approximately parallel to the regional structure and foliation. The other set strikes northwest. Most of the joints have steep dips. A third set of fractures (also known as sheet jointing or sheeting) runs approximately parallel to the ground surface, facilitating groundwater movement down the hilltop but also making shallow bedrock tend to yield more water per foot of the wellbore than deep bedrock.

There is a significant natural fluctuation of groundwater levels, on the order of 15 ft and more, recorded in bedrock wells in the area (Grossman, 1957). The highest groundwater levels occur in spring and the lowest in late summer. The latter follows a summertime period when evapotranspiration exceeds precipitation, which eliminates bedrock recharge.

### Groundwater Budget

The EAF relies on an inappropriate bedrock groundwater calculation model to assess groundwater recharge rate at the Garrison Golf site.

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<sup>1</sup> Grossman I. G., 1957. The Ground Water Resources of Putnam County, NY. Bul. GW-35, Albany, NY.

The stated purpose of the water budget calculations is to compare natural recharge to the onsite aquifer against aquifer withdrawal. If water consumption exceeds the natural recharge rate, a special Planning Board permit would be required.

There are two critical hydrogeologic flaws regarding the Applicant's water usage calculations presented on EAF page 65-69 and on Exhibit 29A. First, the EAF fails to acknowledge that the recharge rate calculated based on infiltration capacity of surficial onsite soil types is different from the recharge rate to the bedrock aquifer. The latter is generally much smaller as it is controlled by the infiltration across the top of bedrock surface. A portion of the recharge that is rejected at the top of bedrock accumulates within the till overburden and moves atop the sloping bedrock surface towards the nearest stream. This condition generally occurs during winter and spring but diminishes over summertime when recharge effectively disappears, and the water table sinks into the bedrock.

Second, the EAF projects that the amount of water projected that will be needed at the Site will significantly increase from the current amount of 9,820 gpd to 18,344 gpd at full buildout (See EAF p.20).<sup>2</sup> To support this proposed increase in domestic water use, the EAF posits that water from the east of the site will replenish water extracted at the site, as shown on Exhibit 29A. ***This approach fails to account for the layout of topographic contours indicating that, under natural conditions, shallow bedrock groundwater from the east discharges to and feeds the ponded tributary to the Phillipse Brook.***

What the budget calculations really show is that natural onsite recharge cannot sustain the planned withdrawal from the bedrock. To meet HVSF's proposed water demand, groundwater withdrawal from the bedrock will likely induce significant drawdown effects far into adjacent areas.

The EAF attempts to reference the Phillipstown Zoning code in support of the erroneous hydrogeologic model (See EAF p. 67-69).<sup>3</sup> However, the Zoning Code requires classification of soils into water transmitting categories. Hydrologic soil classification is to be determined by criteria detailed in United States Department of Agriculture, Natural Resources Conservation

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<sup>2</sup> EAF indicates that irrigation extraction is not included in water use calculation (See EAF p. 68). The EAF also suggests that irrigation use will be +/-50,000 gpd (See EAF Table 5).

<sup>3</sup> Phillipstown Zoning Code referenced by EAF provides:

Determination of a parcel's natural recharge. The natural recharge rate for a parcel shall be determined by identifying the soil types on the property, classifying them by hydrologic soil groups (A through D, A/D and C/D), and applying a recharge rate of 20.2 inches/year for A and A/D soils, 14.7 inches/year for B soils, 7.6 inches/year for C and C/D soils, and 4.2 inches/year for D soils, and multiplying the recharge rate(s) by the number of acres in the parcel for each soil group. (Zoning Code 175-16F.)

Service, Part 630 Hydrology, National Engineering Handbook Hydrologic Soil Groups Chapter 7. Soils are supposed to be assigned to one of four hydrologic groups based on their vertical distance (i.e., depth) to a water-impermeable (or “restrictive”) layer<sup>4</sup>, depth to seasonal high-water table (SHWT), and the saturated hydraulic conductivity (Ksat) of the least transmissive layer above the water-impermeable layer.

Accordingly, although the zoning methodology cannot accurately assess the actual recharge or availability of groundwater in bedrock, even this methodology requires consideration of impermeable conditions in order to classify the soils into the appropriate soil groups. ***Notwithstanding the required methodology, the EAF fails to reference or even acknowledge restrictive role of the top of bedrock surface or a high-water table in classifying soils at the HVSF site.***<sup>5</sup>

#### Well Interference and Offsite Impacts

The evidence of significant lowering of water levels in offsite supply wells is provided by results of pumping tests conducted in the two irrigation wells, Well #8 and #9, alluded to on page 69 of the September 2021 EAF. Drawdowns generated in these wells during those pumping tests (70 ft and 60 ft, respectively) are considered moderate for crystalline bedrock settings, but even higher drawdown is expected by proposed Well A. It is because the saturated overburden thickness in the irrigation wells tested is much greater than in the area or proposed wells A and B. The former are located near the ponded stream area and the latter would be in the hilltop area.

Several offsite wells showed drawdown induced by the pumping tests. Three of the most severely impacted wells required mitigation measures. Although the EAF gives only sketchy information on the tests, and project drawings are labelled “Not to Scale”(1), it is apparent from Exhibit 29 that supply wells located more than 400 ft from the pumped wells (using a 200-ft circle drawn around wells as a yardstick) were impacted.

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<sup>4</sup> A restrictive layer is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers. See <https://websol survey.nrcs.usda.gov/app/>

<sup>5</sup> Page 26-27 and 66-67 of the EAF purports to identify and categorize soil type referenced in the zoning code to assess the groundwater recharge. The September 2021 EAF states on page 54 that soil boundaries were developed using the USDA Soils Conservation Service’s Soil Survey of Putnam & Westchester Counties, New York, issued in September 1994, augmented by boundaries available on the USDA website as GIS Shape files. See <https://websol survey.nrcs.usda.gov/app/>

The narrative on page 69 of EAF appears to downplay the documented offsite impacts by stating that the irrigation pumping rates were quite high, a condition that would exacerbate adverse influence on onsite wells. ***However, it is not the pumping rates, but the drawdown generated by the pumping that causes offsite drawdown impacts.***

#### Important Well Water Quality Data are Missing

The results of testing of existing wells for contaminants, presented in the EAF, are incomplete. Specifically, no well testing results for metals have been provided in Table 3 of Appendix J. This is important in view of the fact that the soil and sediment testing results (provided in Figure 3A, 3B and Tables 1- 2 of the same Appendix J) indicate the exceedance of various soil standards for mercury, lead and chromium, including the protection of groundwater cleanup soil standard for mercury. The EAF's reliance on results for metals in surficial soil samples collected at the proposed locations of Wells A and B is highly questionable because the areas of groundwater flow contribution to wells extends far beyond the well locations and is less predictable in fractured crystalline bedrock settings.

Furthermore, well testing for coliform bacteria as indicators of the bacteriological status of well water is missing; and this is important given the presence of several septic treatment systems at the project site and the use of ponded surface water for golf course and lawn irrigation. Wells in fractured bedrock settings are particularly vulnerable to bacteria contamination because of fast fracture flow and limited capacity to attenuate bacterial migration through fractures. Likewise, sodium should be included in the well testing program because of its presence in septic effluents and the application of road salt during winter months. Elevated sodium concentrations are known to contribute to elevated blood pressure.

#### Testing of Proposed Well A

The EAF (October 2021 Revision) provides no information as to the depth of proposed new water supply Well A or the parameters for its water-level monitoring program. The EAF only states, on page 27, that a 72-hour pumping test will be conducted in this well to determine its yield and that other onsite wells will be monitored during the test to ascertain the zone of influence under pumping conditions and the interconnection of water-bearing bedrock fracture networks. However, offsite private well monitoring requirements would be at the discretion of the Putnam County DOH engineer.

In my opinion, as a minimum, offsite private wells located northeast to southwest from the proposed onsite wells, as well as east of the tributary to Phillipse Brook, should be included in the water-level monitoring program. This is based on the northeasterly strike of a major set of bedrock joints that is parallel to the structural bedrock grain as well as the observed offsite well responses of earlier pumping tests conducted in the two irrigation wells.

Moreover, it should be an imperative that the 72-hour pumping test be conducted during late summer, a critical time of maximum water demand. This time follows a period when evapotranspiration exceeds the rainfall recharge, resulting in the lowest bedrock groundwater levels. This drop in well water levels reduces the available well drawdown and well yield. A 200-ft separation well distance from a well is an administrative requirement that in this circumstance may be inadequate in view of the impacts observed during the earlier pumping tests.

One should keep in mind that the only significant local recharge sources to bedrock during the summertime would be from septic systems effluents and the irrigation, which potentially could impair the well water quality. Water quality testing program during the pumping test should include testing for metals, pesticides and bacteria.

### Conclusion

Material flaws and data gaps in the EAF leads to a conclusion that the proposed HVFS project has the potential of creating significant environmental impacts, including degradation of groundwater quality and drawdown in offsite wells. Accordingly, further environmental investigation is necessary.

**Attachment**  
**Curriculum Vitae**

**ANDREW MICHALSKI, Ph.D., CGWP, PG**

1301 JANKOWSKI COURT  
SOUTH PLAINFIELD, NEW JERSEY  
Tel (908) 757-8867; e-mail: amichalski@comcast.net

**EDUCATION**

*Ph.D. Technical Sciences (Geological Engineering),  
AGH - University of Science and Technology, Krakow, Poland - 1974*

*M.Sc. Hydrogeology and Engineering Geology,  
AGH - University of Science and Technology, Krakow, Poland - 1969*

**PROFESSIONAL CERTIFICATIONS**

- *Certified Ground Water Professional (CGWP)  
by the National Ground Water Association - No. 272*
- *Registered Professional Geologist in Pennsylvania - No. PG003076G*
- *Certified Professional Geologist in Virginia - No. 670 (Inactive)*
- *Licensed Site Remediation Professional New Jersey Lic. #591669 (Not renewed after 2018)*

**SUMMARY OF PROFESSIONAL EXPERIENCE**

**Michalski & Associates, Inc.**  
**South Plainfield, N.J.**  
***Principal Consultant***

**1995-2018**

In 1995, Dr. Michalski formed a specialty environmental consulting firm which provided hydrogeological and environmental remediation services to industrial clients, law firms, consulting engineering firms, government, and citizen groups. Major clients include Merck & Co.; Shell Oil Co.; Consolidated Edison of NY; Dover Twp. NJ; Georgia Pacific Corp.; Groundwater & Environmental Services; Middlesex Water Company; Stepan Chemical; Sherwin-Williams; Wayne Twp, NJ; Cattaraugus County, NY; TRC-Raviv Associates; Textile Research Institute; URS Corporation; various environmental groups; USEPA and US Attorney District of NJ.

Dr. Michalski has over 50 years of consulting and academic experience in hydrogeology and applied geosciences, with emphasis on groundwater remediation, evaluation of groundwater resources, regulatory compliance, siting of sensitive waste disposal facilities and expert testimony.

Dr. Michalski has extensive project experience in characterization and remediation of unconsolidated and bedrock aquifers. He served as project manager/lead investigator for

remediation projects at more than a hundred contaminated sites. Dr. Michalski is a recognized expert on hydrogeology of the Newark Basin, NJ. He published seminal papers on this subject and taught professional development course on hydrogeologic characterization of fractured bedrock.

He was appointed by the Governor to NJDEP's Standing Committee on Water Quality and Quantity of the Science Advisory Board. He also served in a committee preparing NJDEP's guidance document on groundwater site investigation, remedial investigations and remedial action.

As expert witness, he prepared numerous expert reports, testified in courts and at adjudicatory hearings.

**Rutgers University,  
New Brunswick, New Jersey  
Visiting Part-Time Lecturer** **1986-1995**

For nine years, Dr. Michalski served as a visiting part-time lecturer of hydrogeology at the Geology Department, Faculty of Arts and Sciences, Rutgers University.

**The Whitman Companies, Inc.  
East Brunswick, N.J.  
Director of Hydrogeology** **1989-1995**

As director of hydrogeology, Dr. Michalski provided technical expertise, leadership and supervision in the areas of site assessments, geologic and hydrogeologic characterization, remedial investigations, and groundwater remediation projects. Some of his professional accomplishments include:

- He directed and performed numerous groundwater investigations, assessments and cleanups under the ISRA (ECRA), BUST, NJPDES and State Case Management programs in New Jersey.
- He developed an innovative testing methodology to characterize fracture flow and contaminant migration at complex bedrock sites.
- Dr. Michalski designed a successful treatment train for enhanced recovery of residual DNAPL solvents below the water table in northern New Jersey. Record-setting volumes and recovery of DNAPLs were achieved. This project won the national Excellence in Environmental Engineering Award in small project category in 1997.
- Dr. Michalski provided expert hydrogeologist's opinions on proposed low-level radioactive waste disposal sites in New York and Connecticut. As an expert witness, he testified before the Low-Level Radioactive Waste Siting Commission in Illinois on a

proposed disposal site in Martinsville. For NRC, he prepared an expert opinion on potential impacts of a release from a nuclear power plant on ground water system.

- He consulted PACE, a concerned citizen group opposing the use Retsof Salt Mine working for waste disposal. Subsequently, he testified at the Brodsky Hearing on issues related to the collapse of this salt mine located in Upstate New York.
- He prepared expert reports on dating contaminant discharges and allocating of cleanup responsibility for several industrial sites and seven gasoline service stations in New Jersey. Dr. Michalski also served as an expert witness before an AAA panel in a case involving cleanup responsibility for a 600,000 gallon fuel oil spill in southern New Jersey.
- Other cases for which he prepared expert hydrogeologist's opinions include contaminated municipal wells in Wallington, NJ, and a proposed commercial sanitary landfill in Cattaraugus County, NY.

**TRC Environmental Consultants,  
Somerset, N.J.**

***Principal Hydrogeologist***

***1987-1989***

Responsible for the technical supervision and management of diverse groundwater projects for industrial clients, developers and government. Other responsibilities pertained to hydrogeologic training of technical staff and development of internal standards for conducting hydrogeologic investigations at hazardous waste sites. Dr. Michalski's major projects included:

- Contaminant assessments and development of cleanup plans for an industrial bedrock site in North Jersey contaminated with chlorinated hydrocarbons and for a large chemical plant site in Central Jersey contaminated with a myriad of compounds.
- Remedial ground-water investigations and remediation of two contaminated UST sites.
- Expert hydrogeologist's services for proposed solid waste landfill sites in Somerset County, NJ, and two counties in New York State.

**The Earth Technology Corporation,  
Somerset, N.J.**

***Senior Hydrogeologist***

***1983-1987***

Responsibilities included planning, management and technical supervision of hydrogeologic investigations at hazardous waste facilities, landfills, superfund sites, Industrial (ECRA) sites, and a nuclear power plant. Selected projects include:

- Development of groundwater supply for a nuclear power plant in Missouri.
- For the USEPA, Dr. Michalski performed technical reviews of ground water monitoring systems and landfill designs of RCRA Part B Permit Applications. Designed and implemented groundwater investigations at two CERCLA sites.
- As part of an Environmental Assessment for a candidate high level nuclear waste site at Richton Salt Dome, Dr. Michalski authored technical memoranda on fluids in salt deposits, anomalous zones, and in-situ stresses in salt domes. He also investigated worldwide occurrences and mechanisms of gas outbursts in salt and potash mines and supervised an underground salt coring project at the Avery Island Salt Mine.
- Dr. Michalski was responsible for technical management of extensive ground water and subsidence studies for RCRA regulated facilities located in the karst terrain of Puerto Rico. The studies involved numerous borings and deep monitoring wells, use of several geophysical methods, geomorphologic and geotechnical analyses, and dye tracing. He developed an innovative analysis of water level response to storm water discharge through on site sinkholes.

**University of Port Harcourt, Nigeria**  
*Senior Lecturer and Director of  
 Studies in Geology*

**1977-1982**

- Taught hydrogeology, geology, engineering geology, and soil mechanics courses.
- As director of studies at a newly established university, he developed applied geology curriculum, organized teaching and research facilities, and initiated regional studies of sea water intrusion into coastal aquifers of the Niger Delta.

**AGH University of Mining & Metallurgy,  
 Krakow, Poland**  
*Assistant Professor*

**1969-1977**

- Taught engineering geology, hydrogeology, and mining geology courses.
- Dr. Michalski performed an extensive physical modeling of coupled fluid and heat flow in the process of underground smelting of sulfur deposits for variable hydrogeological conditions and well layouts. He used finite element modeling to investigate stress and elastic energy distributions in the vicinity of mining face approaching faults.

- Dr. Michalski served as geotechnical and hydrogeologic consultant to sulfur, coal, and salt mining industries in Poland. The latter included evaluation of surface subsidence at the Wieliczka Salt Mine.

## **PROFESSIONAL ORGANIZATIONS**

*Association of Ground Water Scientists and Engineers - Member since 1984*

*Association of Engineering Geologists - Member since 1984; Past Vice President of NY-Philadelphia Section*

*Geological Association of New Jersey - Past Counselor-at-large.*

## **PUBLICATIONS**

The most recent of his over 40 technical publications include:

Michalski, A. *Plume Delineation Strategy for Contaminated Sites in Dipping Sedimentary Bedrock*. In: 2015 NGWA Fractured Bedrock Conference, Sep. 28-29, 2015. Burlington, VT.

Michalski, A., 2010. *Hydrogeologic Characterization of Contaminated Bedrock Sites in the Newark Basin: Selecting Conceptual Flow Model and Characterization Tools*. In: Herman, G.C. and Serfes, M.E., eds., *Contributions to the geology and hydrogeology of the Newark basin*. NJ Geological Survey Bulletin 77, Trenton, NJ, Chapter D, p. D1-D12.

Michalski, A. *Conceptual Flow Models and Ground-Water Characterization Strategy for Sedimentary Bedrock Sites*. In: 2004 U.S.EPA/NGWA Fractured Bedrock Conference, Sep. 13-15, 2004. Portland, Maine.

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- Michalski, A., R. Britton and A.H. Uminski. *Bedrock Hydrogeology of the Manville-Bridgewater Section of the Raritan River Valley*. Environmental Geology of the Raritan River Basin. 9th Annual Meeting of the Geology Association of New Jersey, Somerset, New Jersey. October 30-31, 1992.
- Michalski, A. *Hydrogeology of the Brunswick (Passaic) Formation and Its Implication For Ground Water Monitoring Practice*. Ground Water Monitoring Review, Fall 1990 Issue, pp. 134-143.
- Michalski, A. *Hydrogeologic Characterization as a Key Factor for Aquifer Remediation in Fractured Brunswick Formation*. In: Aquifer Reclamation and Source Control Conference Woodbridge, NJ, November 1990. Conference sponsored by USEPA and NJIT.
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Michalski, A. *Application of Temperature and Electrical Conductivity Logging In Ground-Water Monitoring.* Ground Water Monitoring Review, Summer 1989 Issue, pp. 112-118.

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# The Economics of Sports Stadiums: Does public financing of sports stadiums create local economic growth, or just help billionaires improve their profit margin?

Posted On : April 4, 2019 (<https://econreview.berkeley.edu/the-economics-of-sports-stadiums-does-public-financing-of-sports-stadiums-create-local-economic-growth-or-just-help-billionaires-improve-their-profit-margin/>) Published By : BER staff (<https://econreview.berkeley.edu/author/uber/>)



KARTHIK VEGESNA – APRIL 4, 2019

FEB 17 2022

Sports fans can be irrational. To someone watching from the outside, fans' behavior is puzzling: their fanatical, unwavering support, and emotional investment in their teams seem inexplicable. However, as an avid fan myself, I have realized that much of the true allure of sports is intangible. Rooting for your teams is largely based on where you live, and you derive a sense of belonging from being part of a community of irrational, borderline psychotic fans. However, professional sports are also a business. As such, team owners, most of whom are billionaires, profit off fans' commitment by having local taxpayers foot the bill for stadiums that cost billions of dollars. This leads us to my primary question: is the economic impact of stadiums in local communities significant enough to warrant the entire community paying for it?

The reasoning behind public financing of stadiums is predicated upon a belief that new stadiums will create a significant impact on the local community through increased jobs in the short-run and increased spending through tourism over the long-run. The short-run impact can be significant, as seen with the Los Angeles Rams, whose new stadium in Inglewood is expected (<https://patch.com/california/losalamitos/local-jobs-created-building-new-los-angeles-rams-stadium>) to "provide more than 3,500 on-site construction jobs in Inglewood and more than 10,000 jobs by the time it is completed." However, many advocates of publicly-funded stadiums are banking on a "multiplier effect," in which increased local income created through these construction jobs could lead to further spending, investment, and job creation, thereby creating a long-term benefit for the local economy. Another important reason why so many teams succeed in receiving public funding for stadiums is the threat of leaving (<https://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1139&context=yldr>) and the corresponding dissatisfaction that residents have with the city after a team moves. For example, when Seattle refused to pay for a basketball stadium in the city, owner Clay Bennett decided to move the team to Oklahoma City, renaming his team from the Seattle SuperSonics to the Oklahoma City Thunder. On that account, the idea of public financing is nuanced, but it is rooted on questionable economic ideals and intimidation of local residents.

Unfortunately, the subsidies have not created the local impact that they promised. To understand why, let's consider the Atlanta Falcons' new stadium, which cost \$2 billion for construction—\$700 million of which was paid by local taxpayers. While proponents may talk about a multiplier effect, several theoretical and empirical studies (<https://research.stlouisfed.org/publications/page1-econ/2017-05-01/the-economics-of-subsidizing-sports-stadiums/>) of local economic impact of stadiums have shown that beliefs that stadiums have an impact that matches the amount of money that residents pay are largely unfounded. The average stadium generates \$145 million per year, but none of this revenue goes back into the community. As such, the prevalent idea among team owners of "socializing the costs and privatizing the profits" is harmful and unfair to people who are forced to pay for a stadium that will not help them.

Further, a study (<https://www.brookings.edu/articles/sports-jobs-taxes-are-new-stadiums-worth-the-cost/>) by Noll and Zimbalist on newly constructed subsidized stadiums shows that they have a very limited and possibly even negative local impact. This is because of the opportunity cost that goes into allocating a significant amount of money into a service like a stadium, rather than infrastructure or other community projects that would benefit locals. Spending \$700 million in areas like education or housing could have long-term positive consequences with the potential for long-term increases in the standard of living and economic growth.

## STADIUM COSTS

COSTS ACROSS MAJOR SPORTS

AVERAGE COST OF AN NFL STADIUM **1.2B**

AVERAGE COST OF AN NBA STADIUM **620M**

AVERAGE COST OF AN MLB STADIUM **440M**

AVERAGE COST OF AN NHL STADIUM **170M**

Image: Ballparks of  
Baseball

(<https://www.ballparksbaseball.com/comparisons/current-ballparks-costs/>)

Additionally, it is important to consider that public financing is largely helping billionaires pay less for a service that they can afford. This dangerous precedent is an unnecessary privilege rather than a necessity. These sports teams are supported by successful owners who are capable of funding stadiums themselves. The owners will be compensated handsomely through the profits received through

(<https://www.statista.com/statistics/193553/revenue-of-national-football-league-teams-in-2010/>) ticket sales, corporate advertising, and concessions over the next several decades. Public subsidies are an unfortunate power play used by these influential teams on local communities that are emotionally attached to sports teams, and a shift to making these projects private is going to be important moving forward.

Furthermore, stadium construction in college sports is indicative of the precedent in professional sports. College sports, especially in historic, blue-blood programs, can affect communities just as strongly as professional sports teams can. For example, the University of Alabama's football program brought in

([https://www.al.com/alabamafootball/2018/01/alabama\\_athletics\\_brought\\_in\\_1.html](https://www.al.com/alabamafootball/2018/01/alabama_athletics_brought_in_1.html)) \$174 million in revenue in 2018, which is comparable to professional sports teams. However, Alabama was funded entirely

([https://www.al.com/alabamafootball/2018/01/alabama\\_athletics\\_brought\\_in\\_1.html](https://www.al.com/alabamafootball/2018/01/alabama_athletics_brought_in_1.html)) by the school, carefully

racking up profits before deciding to invest in a new stadium. Starting something similar in professional sports could lead to a system of self-sustenance and owners considering stadium costs when deciding to purchase a new team.

Over the last thirty years, building sports stadiums has served as a profitable undertaking for large sports teams, at the expense of the general public. While there are some short-term benefits, the inescapable truth is that the economic impact of these projects on their communities is minimal, while they can be an obstacle to real development in local neighborhoods.

Featured Image Source: Los Angeles Rams (<https://www.therams.com/stadium/la-stadium>)



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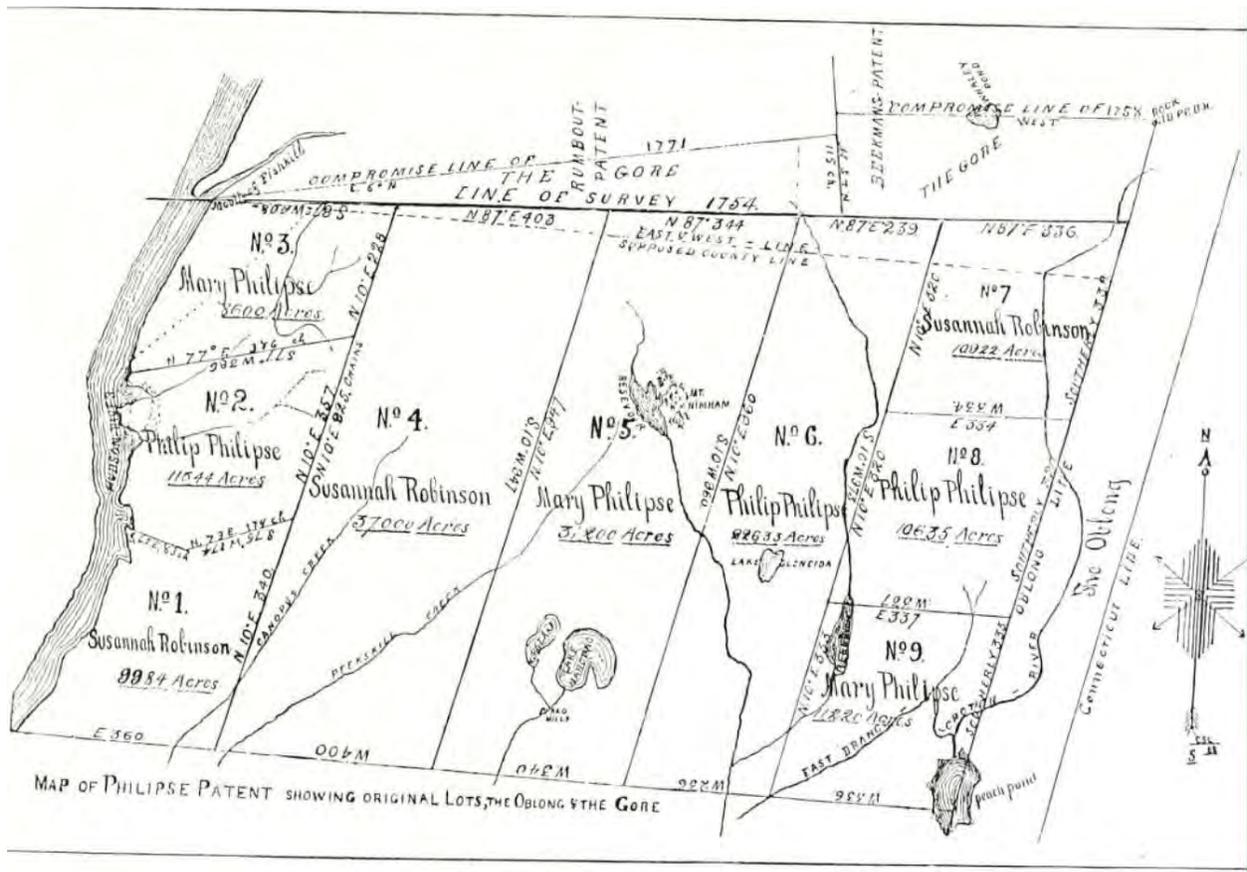
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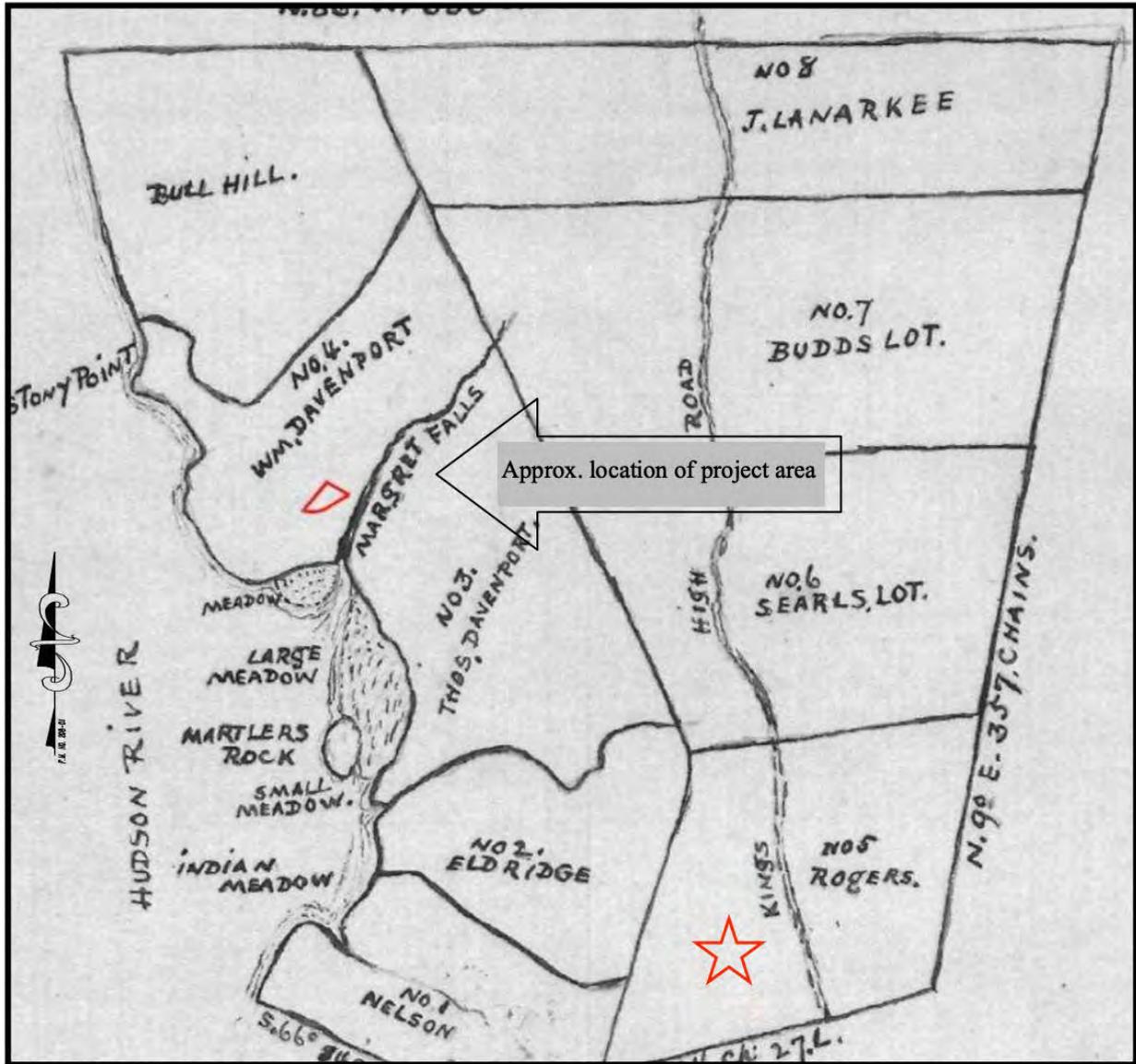
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## Garrison Golf Club & Border Properties

Maps: 1751-1922

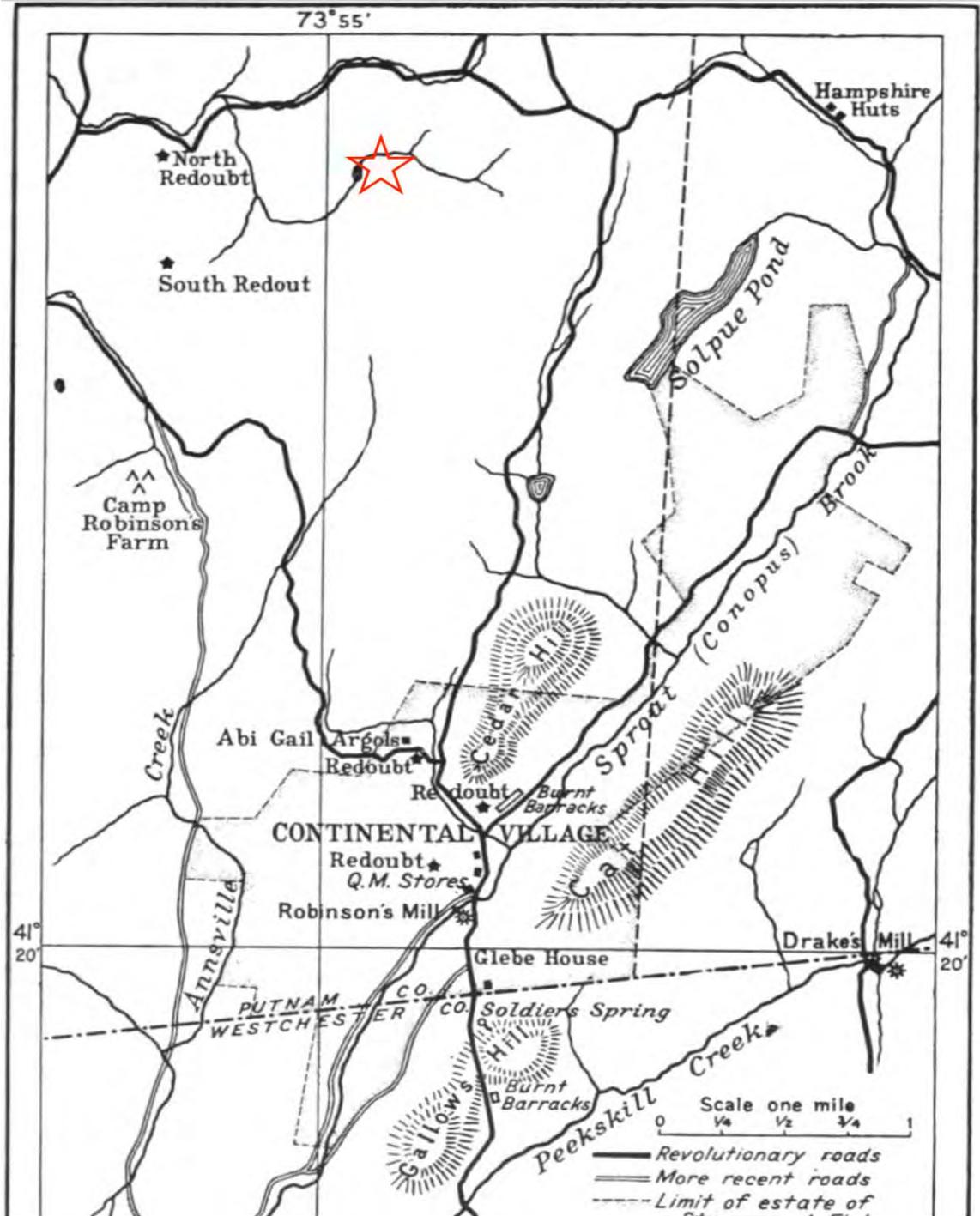


1751-1769: Philipse Patent, Heirs of Frederick Philipse. The golf course property is located on Philipse lot 2.



**Map 3:** Daniel Lambert's 1769 *Map of Water Lot No. 2*. (Source: Putnam History Museum Library)

1769 Lambert/Dortland Map: Property located on Rogers lot#5

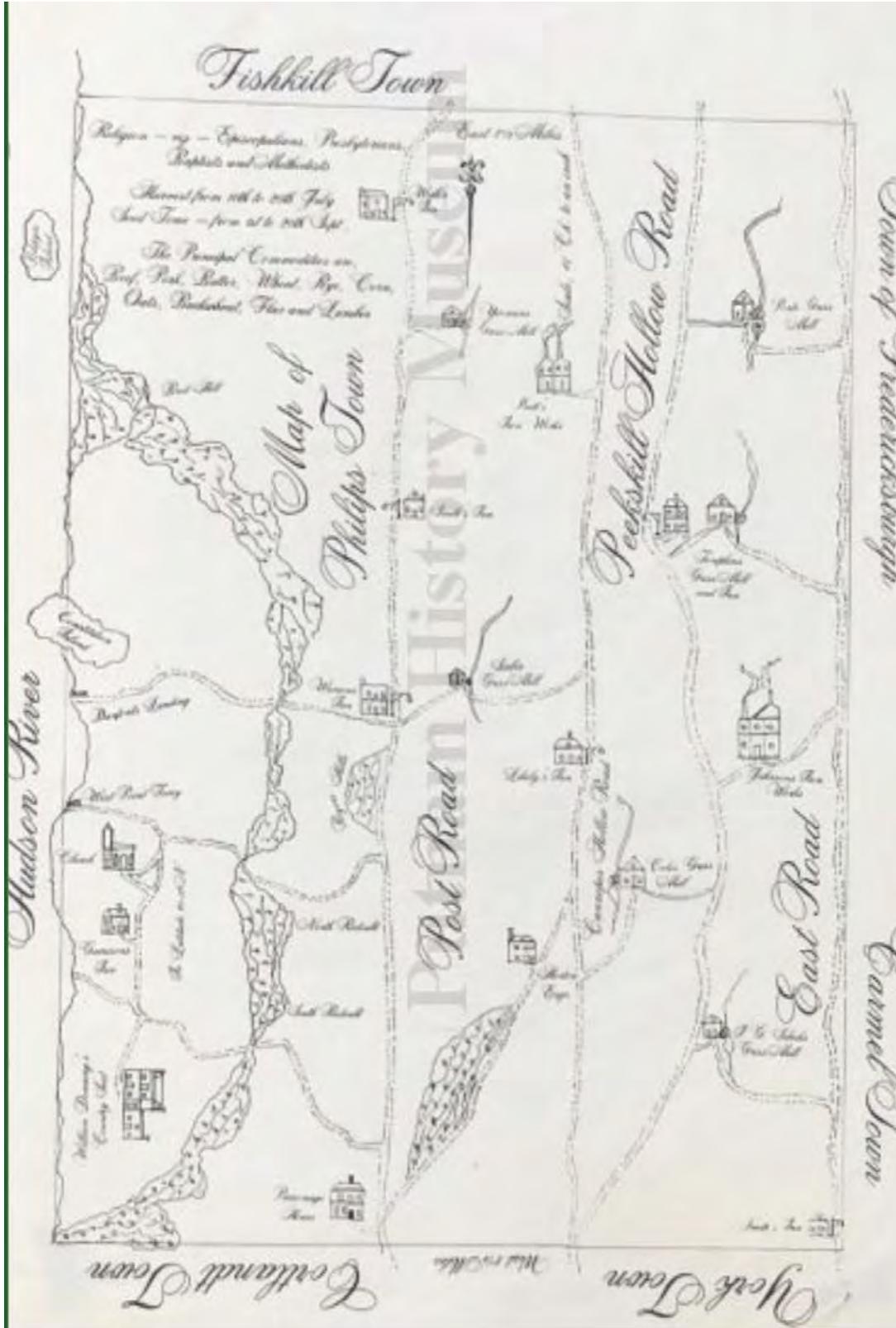


William Louis Carver Map: Revolutionary War archeological sites

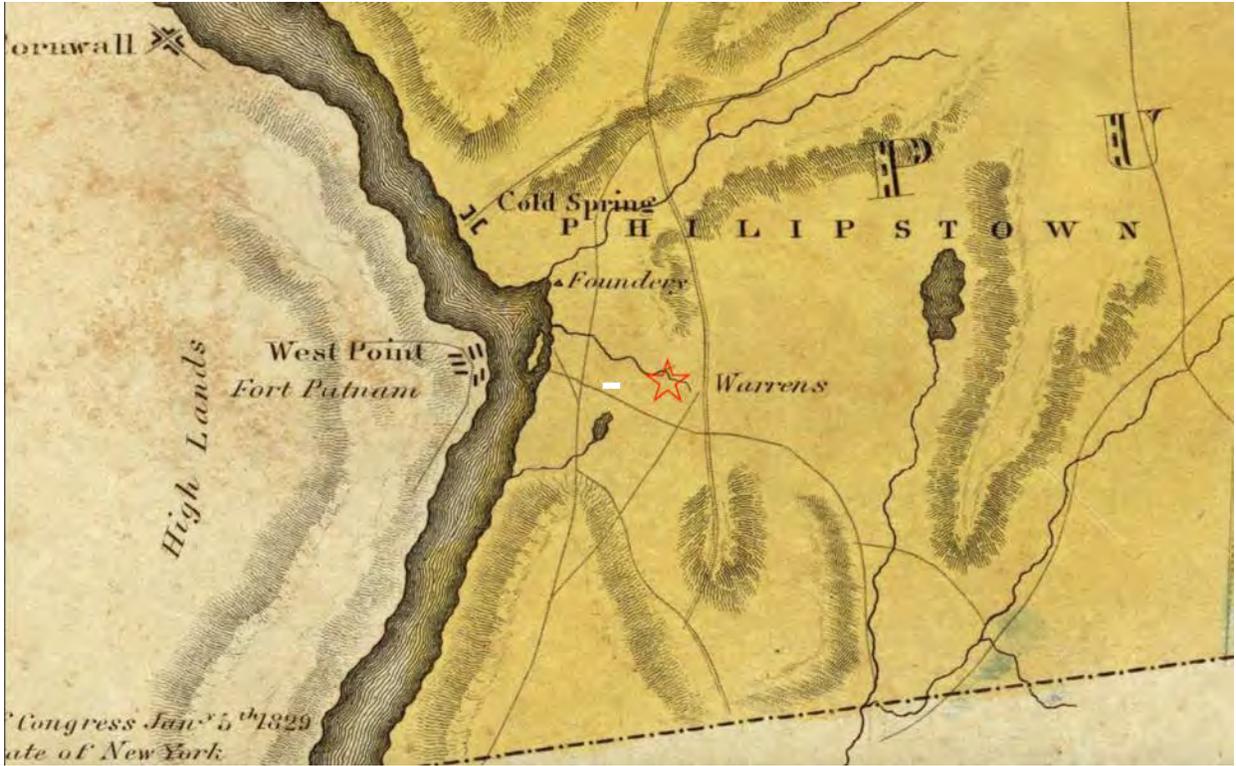


Figure 4. Detail of Parker's 1922 map of Cold Spring showing the location of his Site No. 4 overlooking Foundry Cove and the Hudson River, Putnam County, New York (Parker 1922: Plate 207).

Arthur C. Parker: Native American archeological sites near North Redoubt :Highland Grange (Philipse,Moore,Gouverneur) and Fairlawn estate(Rossiter



1800(copy Belcher, 1950)

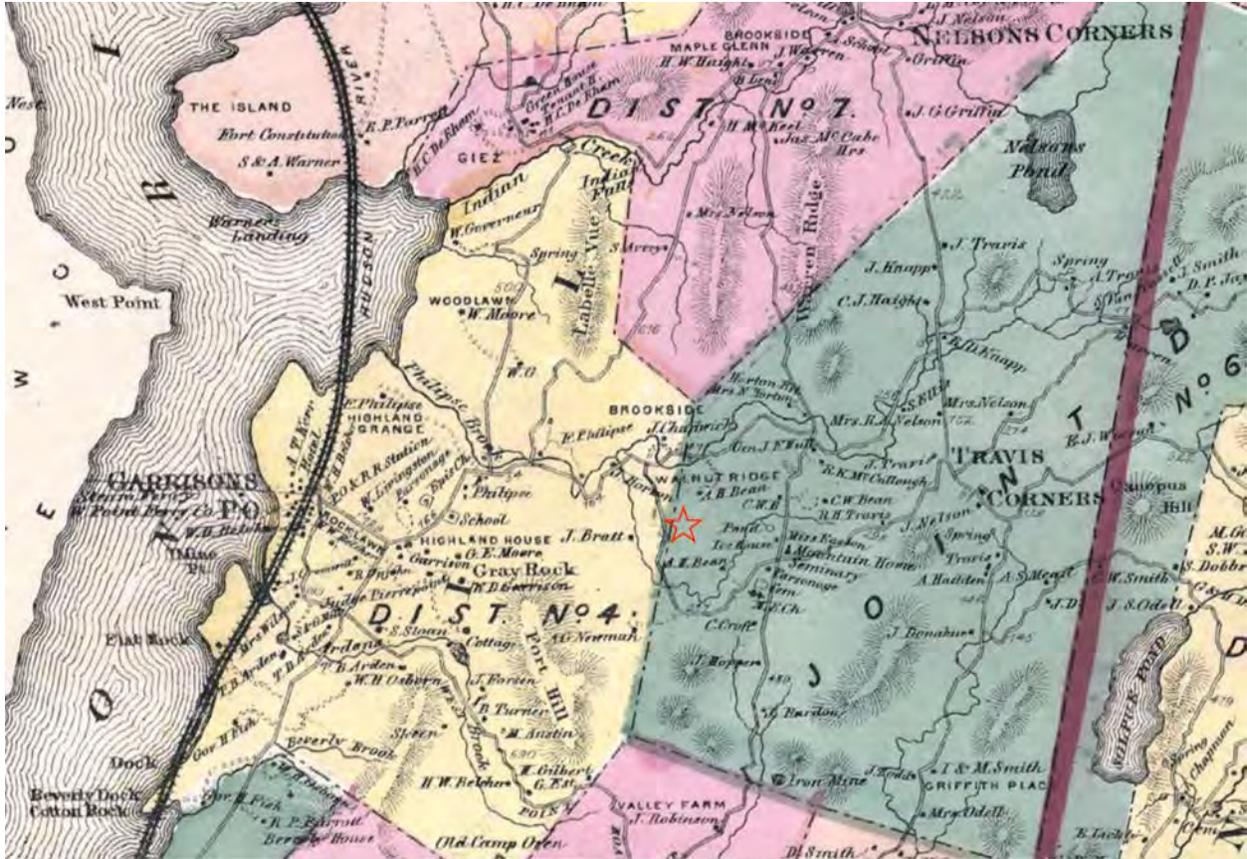


1829 Burr Map of Philipstown

1854 Map Philipstown



[1854 Putnam County](#)



1867 Beers Map:A.B. C.W. Bean"Walnut Ridge"



1870 Map:Bean



## Native American/Pre Contact Sites

Lenapehoking

[Lenape](#)

Stone arrowheads, ax-heads and pottery attributed to Canopus and Wiccopee groups have been found in the fields on North Redoubt Hill as well as at other pre-European contact agricultural sites around Garrison including; Highland Grange (Philipse /Touchstone Farm), Woodlawn (Moore, Malcolm Gordon School, Hasting's Center) and Fairlawn (Rossiter/Dale/ Patterson/ Buck/Boscobel fields south of Cold Spring).

The fields on the North Redoubt and Fort Hill hillside are very old and it's likely that they had been partially cleared for agricultural use before European Settlers.

Dr James S. Nelson, whose property was located near the west side of the North Redoubt, reported to the NYS Museum discovering Native American artifacts in the 1880's.

Amateur archeologist William Louis Carver of The New York Historical Society who grew up in Garrison in the 1870's-80s, reported in Popular Science News, Nov., 1896 that Native American settlements and agricultural sites were common knowledge to many people in the region when he was a young man.

The earliest documented archeological explorations of these locations were conducted by William Beauchamp in his book *Aboriginal Occupation of NY* in 1900.

[William Beauchamp](#)

<https://books.google.com/books?id=kqRNAQAIAAJ&printsec=frontcover&dq=Aboriginal+Occupation+of+New+York+%28Bulletin+32+of+the+New+York+State+Museum&hl=en&sa=X&ei=KTQXVObgNJWqyASTioDQCg&ved=0CDkQ6AEwBQ#v=thumbnail&q=%22cold%20spring%22&f=false>

New York State Museum Archeologist Arthur C. Parker documented seven locations within ½ mile-3 mile radius of the GGC in 1922.

[Parker, Arthur C.](#)

*See New York Archeological Association Bulletin, 1916-1924.\**

Recently, a group of archeologists discovered an endangered 4440 year old archeological site on the Haul Road near the West Point Foundry Site which runs parallel with the Hudson River from Margaret's Brook to Indian Brook. Many artifacts were discovered during this exploration.

Their findings were published in *The Journal Of Middle Atlantic Archeology*, Vol. 35, 2019.

**THE PRE-CONTACT "HAUL ROAD" SITE, WEST POINT FOUNDRY, COLD  
SPRING, NEW YORK: 4400 YEARS OF MICROSTRATIGRAPHIC DEPOSITION**

**JOEL W. GROSSMAN**

**JOSEPH E. DIAMOND  
SUNY NEW PALTZ**

**ERI WEINSTEIN  
TEXAS HEALING ARTS INSTITUTE**

**ABSTRACT**

The rescue excavation of an endangered prehistoric site in the Hudson Highlands led to the discovery of a 4400-year-old sequence of prehistoric cultures spanning from the late Archaic to the Late Woodland periods. The site, designated the Haul Road site, was discovered, buried, and protected from later impacts by a layer of Civil War-era deposits. These deposits were, in turn, overlain by a ca 2.5-foot thick dirt roadway, known as the Haul Road, in Cold Spring, Putnam County, New York. Stylistic analysis documented the presence of 19 diagnostic points, extending from Vosburg and Brewerton Corner-Notched types dating to between 2500 - 3000 BC, to Late Woodland Levanna points from c. 1100 - 1630 AD. In addition to the use of arbitrary 0.10 ft micro-stratigraphic levels and particle analysis, quantified artifact analysis revealed significant shifts in ceramic decoration, and the distribution of worked versus unworked flakes.

66

*Journal of Middle Atlantic Archaeology, Volume 35, 2019*

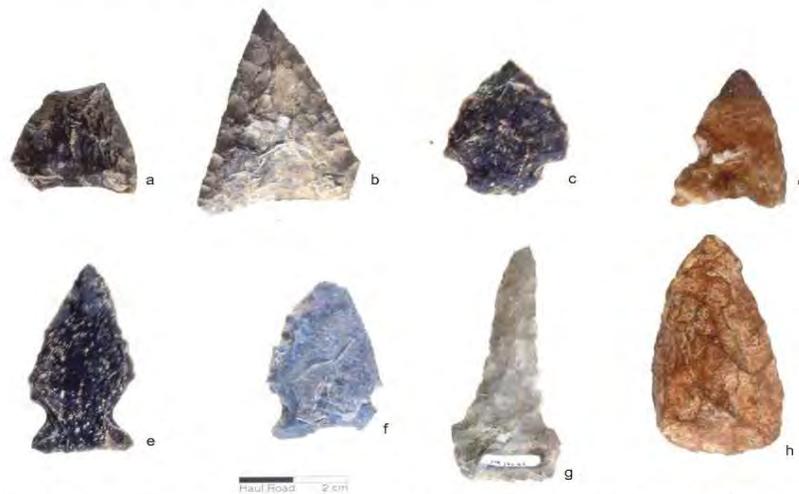


Figure 6. Haul Road site pre-Contact artifacts. a and b, Levanna points from .03 level. c-f and h, untyped points from .04 level. g is a drill from the .02 level.

[Haul Road/WPF/Grossman 2019](#)

[Haul Road:Garrison-C.S.](#)

## Philipse Highland Patent-American Revolution 1698-1783

### Philip Philipse Lots 1 & 2:Pre Revolution

Frederick Philipse was the last Lord Of The Manor of Philipsburg as well as the first descendant of Adolph Philipse to keep an estate in present day Garrison. The Philipse family estate "Highland Grange" was located on the southside of Philipsbrook on a bluff overlooking the river.

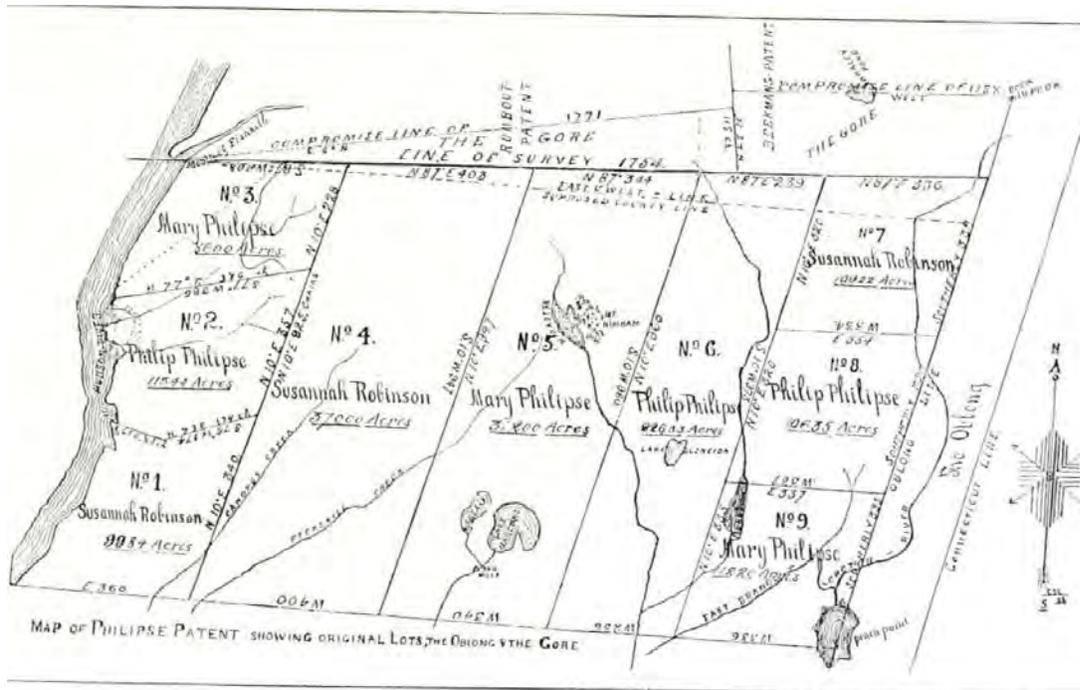


Highland Grange, burned 1861

After his death in 1751 the Highland Patent was divided among his children Philip Philipse, Sushannah Robinson, Mary Morris and Margaret Oglavie. Each heir leased acreage to tenant farmers.

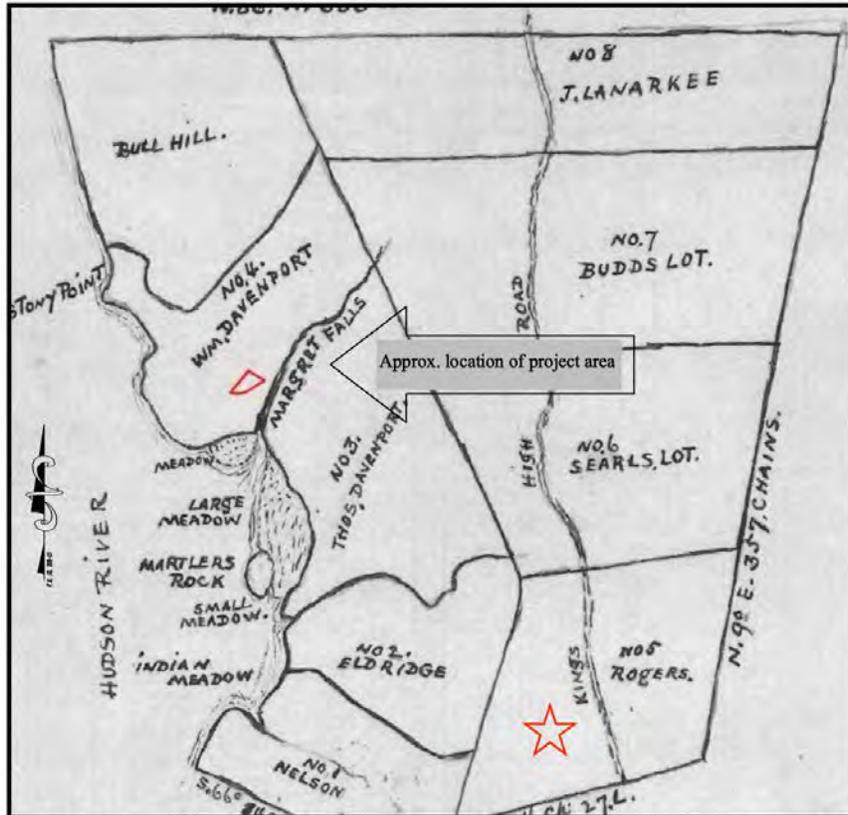
A map showing the 1751 division of the Highland Patent was drawn in by Surveyor Daniel Lambert in 1754.

The present day GGC property is predominantly located within the former boundaries of Philip Philipse water lot #2 with a smaller portion on the southern border near Snake Hill Rd. entrance within the boundaries of Susannah Robinson's water lot #1.



1754 Map of Division of Philipse Patent

Lambert's 1769 map of Philip Philipse water lot #2 illustrate eight lots leased to tenant farmers. The GGC lands located on the southwest portion of Rogers lot #6 and the eastern border of Nelson's lot #1 Philip Philipse died in 1769 and his lots were divided among the remaining heirs of Frederick Philipse.



Map 3: Daniel Lambert's 1769 Map of Water Lot No. 2. (Source: Putnam History Museum Library)

John Rogers and Eli Nelson both operated mills on Philipse Brook. The ruins of both mill sites are still visible today.

The Philipse saw mill on John Rogers estate was located near the intersection of Philipse Brook and Snake Hill Rd ( still visible ) beneath and east of the Toucey estate Bridge. (Gates recently moved to Old Albany Post Rd, south of Canopus Hill). The ruins of Eli Nelson's grist mill are located on Philipse Brook- the westside of 9D, above the waterfall.

Pews in the original St Philip's Church were made from rough cut boards from one of these two mills.

William Pellatreau's 1886 History of Putnam County provides details regarding the various lots leased to tenant farmers indicated in Lambert's 1769 map.

[History of Putnam County](#)

James Kelly 646-823-8597

Research Scrapbook Folder: Hudson Highlands Estate Research. Not for publication.

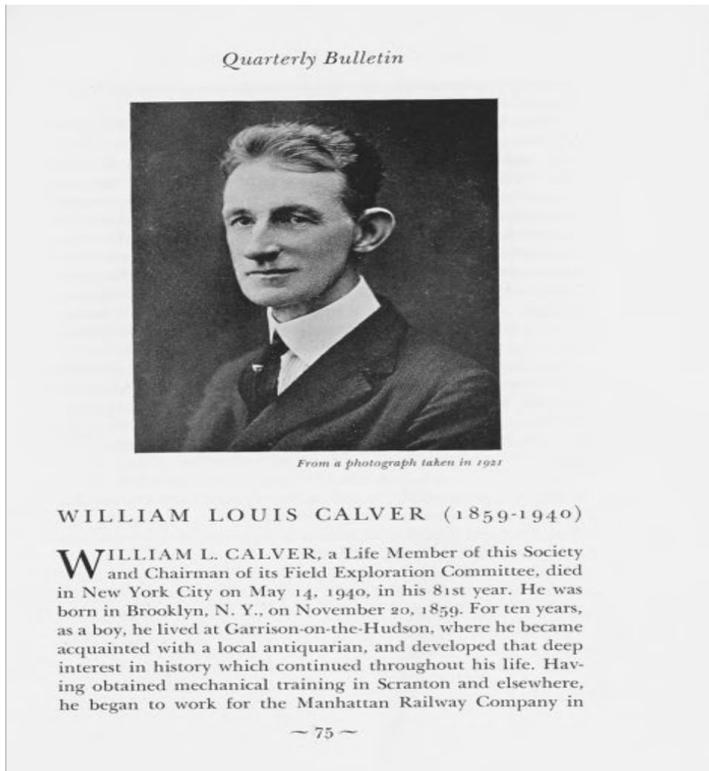
During the Revolution, the property was part of the North Redoubt camps and fortifications.

[Redoubts/Associated Structures](#)

Many artifacts from the camps and fortifications were collected on site between 1870-1940 by archeologist William Louis Calver, members of The New York Archeological Association and the New York Historical Society, Bolton & Field Commission.

William Louis Calver: History Written With Pick And Shovel

<https://babel.hathitrust.org/cgi/pt?id=uva.x000388072&view=1up&seq=62>



[Pelletreau, Wm., History of Putnam County NY, 1886](#)

At the close of the Revolution, The Highland Patent lots were seized from the loyalist heirs of Philipse and sold by the Commissioners of Forfeiture to NY merchant William Denning who purchased all of Beverly & Susannah Robinson's water lot #1 and portions of Philip Philipse's former water lot #2.

Denning sold some of the GGC lands to Henry Garrison in 1815 including the southern border near Snake Hill Rd. Garrison sold smaller portions to Sylvester Haight who's family had leased land from Philipse since the 1730's.

The Haight family farm was located on the same plot occupied by the present day groundskeepers house. See 1854 Map.\*

Local records and nineteenth century maps illustrate that many of the families who had leased their land on and bordering the current GGC property from the Heirs Of Philipse prior to the Revolution remained on site well into the late 19th century including: Height, Horton, Nelson, Croft, Wilson, Rogers, Meeks and Jaycox.

There's a long standing rumor that Frederick Philipse had a lead or graphite mine near the Philipse Mills. A lead mine is indicated on the 1854 Map of Putnam County at the SW base of Warren's Ridge. I haven't found the mines yet but I'm still looking!

## Estates 1850-1930

The opening of the railway in 1849-1850 ushered in an age of wealthy New Yorkers building summer estates on or bordering the present day GGC property .

These estates are indicated on both the 1867 and 1891 F.W. Beers Maps.

- 1) Brookside/Brookmead-built by Nelson, Rogers, Chadwick-burned 1957
- 2) Mountain Home- Built by NYC industrialist AG Newman in 1859. Largest ) estate in this area-600+acres. Burned 1980-81. *See Mountain Home/Alan G. Newman folders\**.
- 3) Walnut Ridge-Built 1855 by A.B Bean. Enlarged 1875, 1894 and 1925. Main house burned in 1959. The secondary mansion (C.W. Bean) is still standing on the east side of Rt 9.
- 4) Windfield - Built 1868 by John Bratt, civil engineer- still standing (Osborn)
- 5) Mountain View-built 1855 for John Frank, enlarged and modified 1910- still standing (Rundel O. Gilbert, Cunningham in late 20th-early 21 centuries).

See 1867 & 1891 Beers Maps.\*

## Brookside/Brookmead

John Rogers, an early settler of Philipse Precinct had a house near where the aqueduct crosses Philipsbrook Rd. This house was later enlarged by a descendant of Rogers, NY attorney John Chadwick in the 1850's as a summer home and named "Brookside"

The house as originally constructed in the early-mid 18th century was a small typical stone saltbox, pre-revolutionary farmhouse. By 1880 it had been enlarged many times. It was essentially six different sections of various sizes and architectural styles-strung together.

In the 20th Century, the property was owned by the Pope family who called it "Brookmead". A fire in 1933 destroyed the oldest section. A second fire in 1946 destroyed the 1860's east wing. The house eventually burned to the ground in 1957. The fires were all attributed to faulty wiring.



Brookside/Brookmead: Rogers/Chadwick Pope house. This rock wall is still clearly visible today on the northside of Philipse Brook Rd .



Brookside/Brookmead: Rogers/Chadwick Pope house. The row of fir trees is still standing near the ruins of the foundation.

## Croft House/Hill Country House/Garrison Inn, 1810-1960

In 1810, after the completion of the Highland Turnpike, the Croft Hotel opened at the NW intersection of Travis Corners rd, Snake Hill Rd and Rt 9 to cater to the stagecoach trade.

Around 1850, The Croft Hotel enlarged to take advantage of the RR trade and changed its name to Hill Country House.

A.G. Newman purchased the hotel in 1867 and turned it into a Methodist seminary: Mt. Home Seminary.

During prohibition, Hill Country House was raided many times for serving and manufacturing spirits.

By 1939 under new management, it was renamed The Garrison Inn. Burned to the ground circa 1960.

See *Croft/Hill Country House files*.\*

See *Alan G. Newman file*.\*





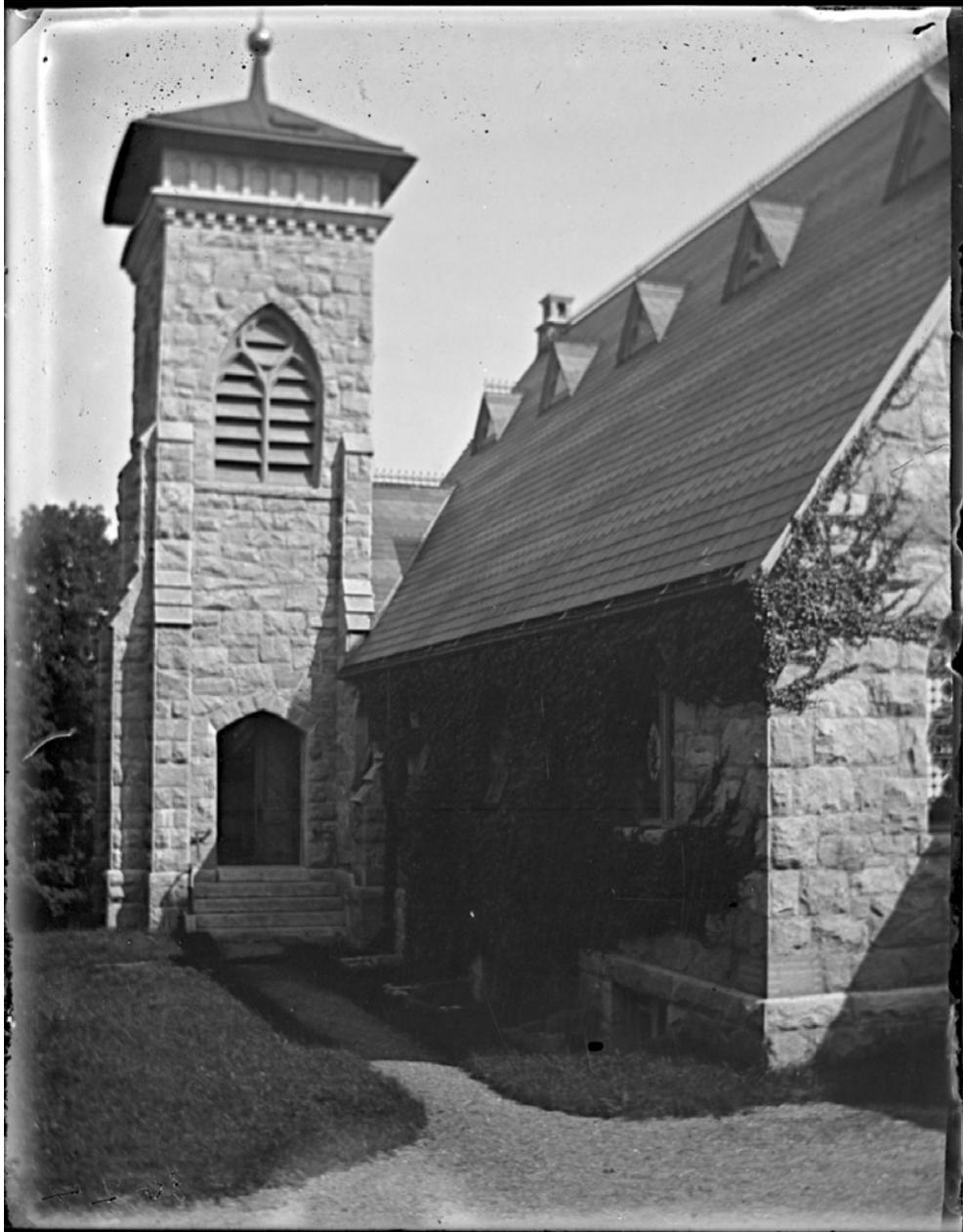
Croft House/Hill Country House photo circa 1870

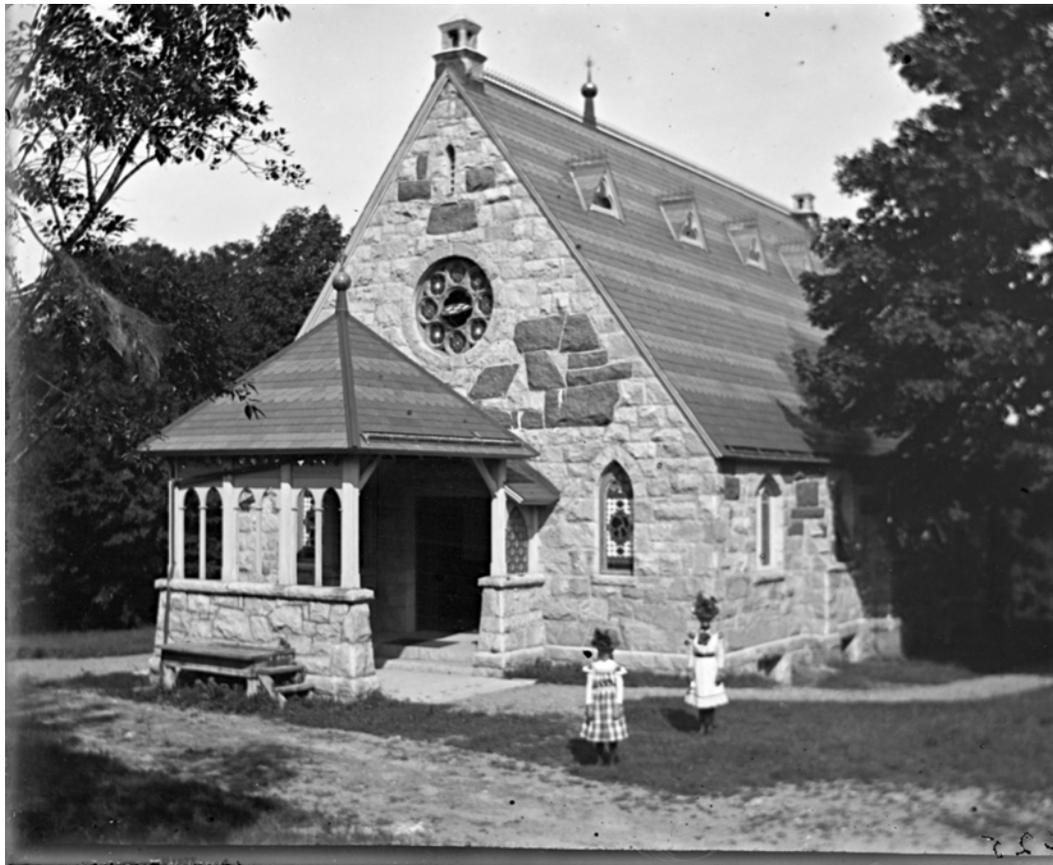
## South Highland M.E. Church

The first South Highland M.E. Church was built on the location of the present (1888) church in 1829 on land purchased from Henry Garrison who had obtained large tracts of land from William Denning in 1815. Garrison's house "Highland Home" was located at the base of the North Redoubt Hill at the end of Nelson's Lane.

A second church was built in the 1860's but it wasn't well built and was condemned after suffering severe storm damage in the mid 1880's.

The present day church, a much improved building, was built in 1888 largely through donations from A.G. Newman who lived next door at his estate "Mountain Home".





South Highland Methodist Church: Photo circa 1900

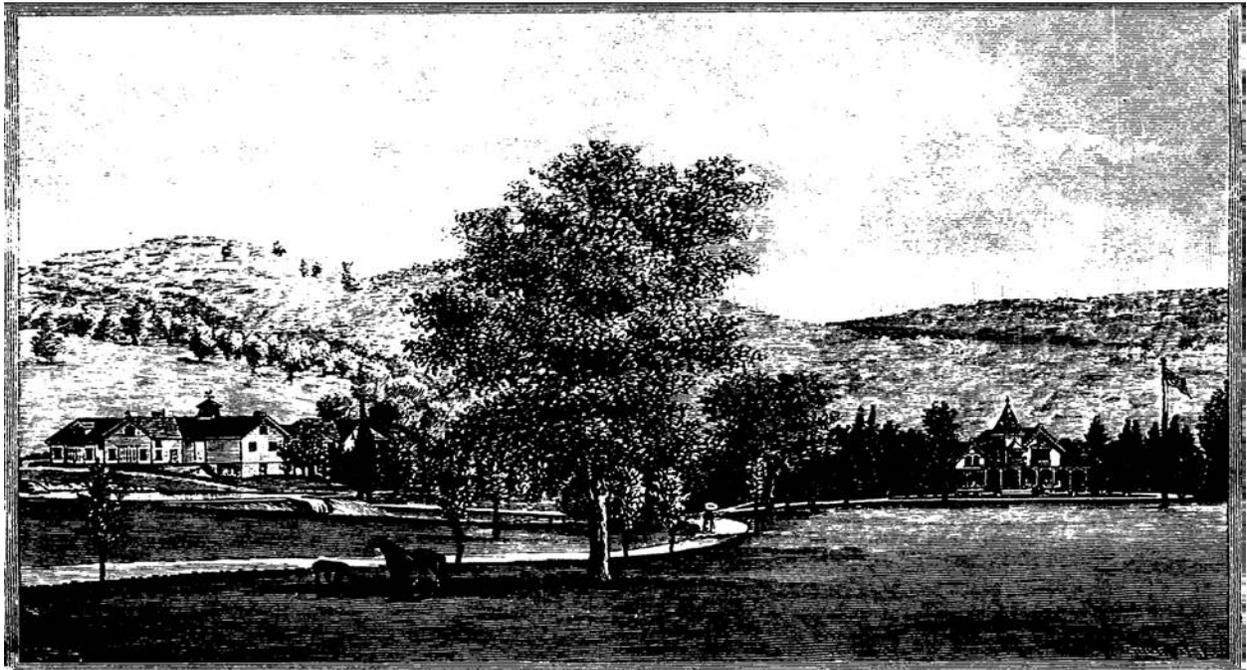
## Mountain Home/Winter Hill Farm

Built by NY hardware magnet Allan G Newman in 1859, Mountain Home was the largest of the estates bordering the GGC property. Over 400 acres the estate included several large barns, an 18th century farmhouse, a Methodist Chapel and a 20'x40'and Lord & Burnham greenhouse. The original mansion was very similar in design to the Osborn's Wing & Wing estate on Rt. 9D

Newman died in 1896 and the estate was purchased by William and Marguerite Rogers. The Rogers remodeled the house in the Colonial Revival style, greatly altering its appearance.

Part of the massive barn complex was destroyed by fire in the late 1940's. A valuable car collection including Auberns, Packards and Duesenbergs was lost in the fire. The rest of the barns burned down in 1980.

The Mansion burned in 1981.



“ MOUNTAIN HOME.”  
RESIDENCE OF A. G. NEWMAN.  
GARRISON'S, N. Y.

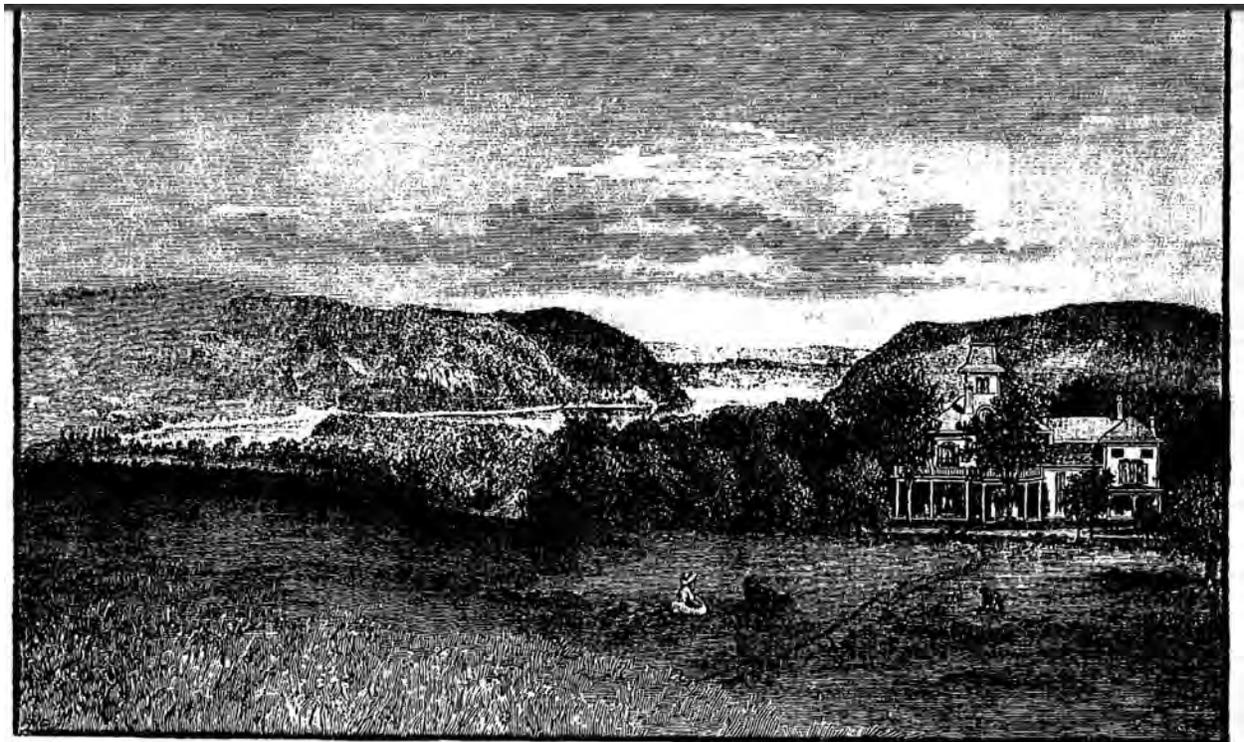
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Research Scrapbook Folder: Hudson Highlands Estate Research. Not for publication.



Mt. Home/Winter Hill Farm:photo circa 1975

## GGC Main Property: Walnut Ridge/ Brownsdale:1855-1959



“WALNUT RIDGE.”  
RESIDENCE OF GEORGE LUFF,

The main body of the current golf course property including the club house occupies the site of a former estate called “Walnut Ridge” built by A.B. & C.W. Bean, NYC bankers in 1855-57. The estate consisted of two mansions, numerous farm buildings, a windmill and an ice pond.

The 150 acre Bean estate was assembled from land purchased from neighboring farmers whose families had lived in the immediate area prior to the American Revolution and Henry Garrison who’s estate “Highland Home” was located on the westside of North Redoubt Hill. *See chain of title search.\**

A.B. Bean’s mansion stood on the current site of the club house. The original house was built circa 1855 brick - early 2nd Empire style with a Mansard roof, quoinés, segmentally arched windows.

Brooklyn NY grain merchant George Luff, purchased A.B. Bean’s house in the early 1870’s

Luff doubled the size of the house over the course of his ownership between 1870-1896. He added a tower, additions and a porte-cochere. Most of the new construction was built of wood instead of brick. Italianate design features were added during remodeling..

Luff died in 1896 and the estate passed to his nephew Major George Luff Fox. Major Fox also continued to enlarge both the mansion and grounds increasing acreage to over 240.

Fox died in 1904 and the estate passed to his son-in-law Robert F. Reubens who sold the estate to NY Boxing commissioner Bill Brown in 1905. Brown renamed the house Brownsdale and the estate Pine Hill Farm.

Bill Brown's Physical Training Camp operated from 1907-1959. A nine hole golf course was built during Brown's ownership and the estate was enlarged to over 260 acres.

Brown's operation offered horseback riding, swimming, racquetball catered to athletes in training, celebrities and wealthy patrons looking to "take the treatment".

Brown added a large hospital wing (still standing) in 1925 with a solarium made from glass designed to increase ultraviolet rays! An olympic size pool was added in 1930.

Guests included: Babe Ruth, Johnny Weismuller, Joe Louis, Tyrone Power and Henry Fonda!

Brown died in 1943. The property was purchased by investors who agreed to pay Brown's widow royalties to continue to operate as Bill Brown's Health Camp

In 1959, the main building was lost to fire. Theodor Law 52, an attorney from Briarcliff Manor, a guest at the camp, perished in the blaze.

1015k
25% <a href="#">Beacon NY News 1959 00726_2.pdf</a> ...Couple Arrested in Bank Robbery Man Killed When Blaze Ruins <b>Bill Brown</b> Resort A guest, identified unofficially as Ted Law of ... ...died as fire de- stroyed the main building at the <b>Bill Brown</b> Health Farm at <b>Garrison</b> this morning. A spectator at the ... 8 3/24/2018 520k
25% <a href="#">Beacon NY News 1941 00066_1.pdf</a> ...is a defense problem which falls properly within the province] <b>GARRISON</b> — The annual horse ture of a farewell attention to Bea- of your local defense council," heshow of <b>Garrison</b> will be staged at con young people leaving soon for ... ...said, "I know that we may count <b>Bill Brown's</b> farm on Sept. 6. This college. Decorations will be ... 8 3/24/2018 608k
25% <a href="#">Beacon NY News 1940 00907_1.pdf</a> ...] --- Cold Spring Post Installs New Officers Horse Show At <b>Garrison</b> • Huge Success <b>GARRISON</b> — The 18th annual <b>Garrison</b> horse show held Satur- day at Brownsdale,



The North Redoubt Club, the forerunner of the Garrison Golf Club headed by president Perry Osborn was incorporated in 1961. They hired noted golf course architect, Dick Wilson to enlarge the facilities to 18 holes.

**Bill Brown's Health Farm**  
**Site of New Redoubt Club**

A group of prominent New Yorkers, headed by A. Perry Osborn, Jr., has purchased the famous old Bill Brown's Health Farm and surrounding acreage at Garrison-on-Hudson and will develop the property into one of the most lavish golf country club sites in America.

To be known as North Redoubt Club, it will begin limited operation of its year-round program this Summer, Osborn has announced.

Determined that its golf course will be one of the finest available, the group has commissioned Dick Wilson, noted golf architect, to design and build a championship 18-hole course.

Wilson is the designer of such famed courses as Meadow Brook and Deepdale in Long Island and the Lyford Cay course in Nassau in the West Indies. Work on the new course will begin immediately.

Membership in North Redoubt will be limited to 25 charter members and organizers, with 400 regular members.

Such well-known sportsmen as Lee A. Ault, Stephen W. Blodgett, I. Townsend Burden, Blair Clark, Guild Copeland, John McMaster, Clarence F. Michalis, Jr. and Oakleigh L. Thorne make up its board of governors. Osborn is president, Warwick Stabler secretary-treasurer, and W. Hoffman Benjamin, Bayard Forster, C. E. Doyle Jr. and William E. Barlow are vice presidents.

Situated directly across the Hudson River from West Point, the new club takes its name from North Redoubt, a fortified outpost, which during the Revolution was located on the property.

The club's 200-plus rolling, wooded acres on a bend in the Hudson are located at one of the most scenically beautiful spots in the East.

The present day grounds are made up of portions of some of the neighboring estates including; Brookside(Chadwick/Pope), Mountain Home (A.G. Newman), Windfield(John Bratt) and Mountain View(John Frank).

See Brown notes/Brownsdale book Livingston/Sviersky Archives\*

### 1915-1990: Plane Crashes & Traffic Accidents

Between 1930-1960, at least 3 planes made crash or emergency landings on the property.

The section of Rt 9 at the eastern border of the property has a long history of fatal car accidents! I have hundreds of newspaper clippings about fatal traffic accidents on Rt 9 near the entrance to The Garrison Golf Course dating from the turn of the 20th century to the present day.

## BOYS AND PLANE THEY CRACKED-UP IN



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Research Scrapbook Folder: Hudson Highlands Estate Research. Not for publication.

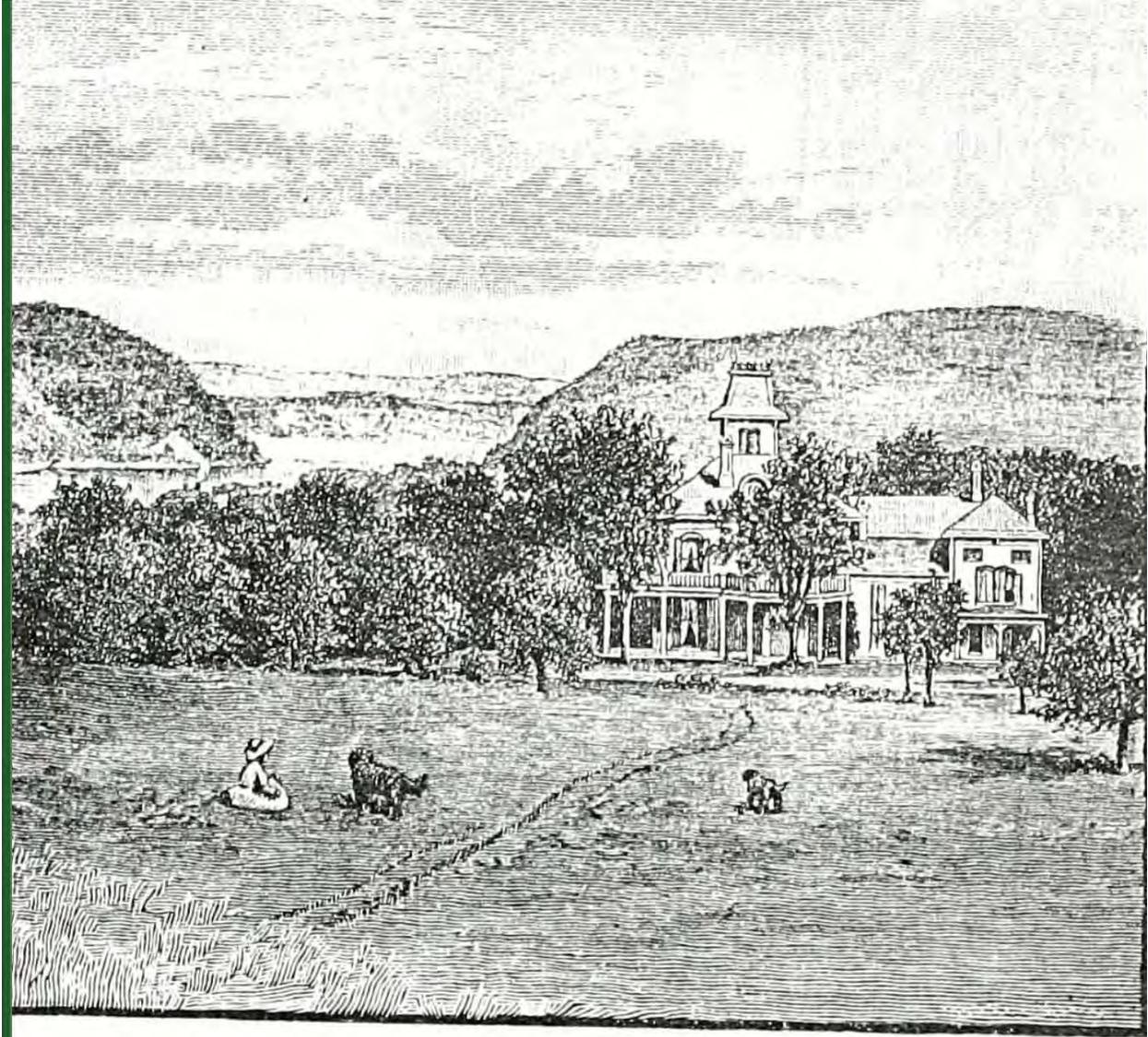


Bill Browns:1920's



Bill Brown's Health Club-1950's





Walnut Ridge, Pelletrau, 1886.

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Walnut Ridge/Brownsdale:: 1936

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North Redoubt: Rev Thompson: Photo circa 1880



**BILL  
BROWN,  
"COUNTRY GENTLEMAN."**

## MOURNED BY BOXING WORLD



William J. Brown.

Sun Staff Photo.

James Kelly 646-823-8597

Research Scrapbook Folder: Hudson Highlands Estate Research. Not for publication.



Bill Brown

THE BEACON NEWS, WEDNESDAY, SEPTEMBER 3, 1941

## Ace Flier Takes Spin in 'Jalopy'



Eddie Rickenbacker, a co-aviator is shown above at the steering wheel of a 1905 Renault — a mighty classy gas buggy in its day. Members of Lowell Thomas' Nine Old Men posed with Rickenbacker prior

to crossing bats with Congressman Hamilton Fish's Statesmen at Garrison Sunday. J. J. Murchio of Greenwood Lake, owner of the "jalopy," is seated next to Rickenbacker. Among those in the picture are

Colonel Stoopnagle, behind Rickenbacker, Lowell Thomas, standing at extreme right, Ted Shane, seated next to Thomas, and Boxing Commissioner Bill Brown of Garrison, wearing dark glasses. Photo by Rogers.

## 'K-N Special' Leaving for a Look at Spring



**SPRING HEADLINES**—The impotted straw boater, shown above, will be in Walter Florell's spring millinery collection to be shown to the press Sunday in New York City. The little white hat is covered with pressed leaves and petals in pink and pale blue and trimmed here and there with a fake emerald. The cage-veil is sapphire blue.

—Your Food Problem—

### Fish Helps to Balance Post-Holiday Budgets

By EDITH M. BARBER

By KATHERINE VAN EPPS  
*The Knickerbocker News Fashion Editor*

**N**EXT WEEK, 150 fashion writers from newspapers across the country will travel to New York City in search of spring.

The event is the nation's biggest fashion show, the New York Dress Institute's 22d national press week. This is a six-day style marathon during which the assembled writers will look at, take notes on and write home details on between 2,000 and 3,000 dresses, suits and coats for spring, forecasting what will be worn in the Easter Parade.

The gamut of garments is not open to the public—but you'll hear about it in stories beginning Monday in *The Knickerbocker News*.

**M**ONDAY and Tuesday, the designers will bring their spring clothes, models and comments on the shape-of-things-to-come to the Waldorf Astoria Hotel. Wednesday, Thursday and Friday, the showings will move to showrooms in the Seventh Ave. Garment District, one of New York City's most colorful sections.

In addition to showings on the "official" schedule, there are many other invitations. Sunday, for instance, will be filled (and "filled" is the word) with four breakfasts where hats and jewelry will be shown, two luncheons and a variety of afternoon parties.

During the week, we'll see more hats—one milliner's invitation reads, in gold letters, "Guests without hats will not be admitted"—and will attend a performance at the Metropolitan Opera.

**A**T THE END of the week, when everybody's feet hurt and the sight of one more spring suit, glass of champagne or fancy sandwich will be the final straw, the visiting editors will journey, en masse, to **Bill Brown's Health Farm near Garrison**.

This is the same **Bill Brown's** you may have read about in *The Knickerbocker News* a couple of years ago when this newspaper featured a series of articles on the **Bill Brown Health Farm**.

Up to now, **Bill Brown's** has been for men only—but on the weekend of Jan. 16, the iron curtain will be pulled aside and the place will be turned over to the women. The trip is arranged by Lind-Gilbert Associates, who accomplished with finesse the difficult task, in other Press Weeks, of taking 100 women on weekend trips to Tanglewood, to West Point, to Martha's Vineyard and, last summer, to Southampton, L. I.

**D**ON'T FORGET to read next week's articles from New York City and to look at the pictures of clothes you'll be able to buy here in Albany within a few weeks. We hope you enjoy them!

# take a week... —subtract 10 years!



We haven't found the Fountain of Youth, but we have a method that magically erases 10 years in one luxurious, relaxing week. Whether you're battling the bulge, the frenetic pace that lines the face or just feel generally below par, **Bill Brown's** Wake Up And Live Week will do wonders for you.

**Bill Brown** is an expert in this field. For almost 50 years **Bill Brown's** has been the last word in health resorts for men. To make this program available to women, **Bill Brown's** has enlarged and renovated its facilities to offer separate women's accommodations. Modern massage and steam rooms, well equipped gym and locker room are now open to women. The atmosphere is so charming, the food so delicious, the scientific slenderizing plan so soothing, you're amazed at the speed that your new svelte self emerges.

Wouldn't you spend a wonderful week to wake up a slimmer, a younger you? Don't delay, write today.

## **BILL BROWN'S**

health center for men and women

**GARRISON, NEW YORK, Garrison 4-3605**

New York Office: Plaza 7-1927

## Here's A Winsome Bunch of Winners



The three riders in the above picture won the family class competition at the 12th Annual Garrison Horse Show last Saturday, which was held at the estate of Bill Brown, New York State boxing commissioner. Left to right are: Miss Cynthia Osborn on Sandy; Miss Alice Osborn on Curri Tuck; Mrs. Frederick Osborn on Frosty Morn. Frederick Osborn stands at right with trophy. Photo by Harrison.



## Hold It

William H. Osborn, on Silver Heart, takes a jump in the pair jumping class at the 12th Annual

All of the small buttons of the artillerymen have impressed upon them a coehorn mortar, while the larger buttons have a cannon and a flag; and here we observe a remarkable feature, for, upon the flag there is plainly depicted the British Union where now the stars of our Union appear. We must, therefore, attribute this



Plate I

"U.S.A." Continental buttons. Found on various sites in the Hudson Highlands.  
Specimen No. 3 is an officer's button, and was found at Redoubt No. 7 on Constitution Island.

design to the very first year of the struggle, before separation from the mother country was in mind.

Artillery buttons of both types have been found by the Committeemen at the "North," and "South" redoubts at Garrison, in Putnam County, and at the several other redoubts comprising the citadel of West Point. The specimens found are mostly of the officer type, yet a few specimens of the solid pewter variety also appear. In company with the foregoing varieties of American artillery buttons there were found at Redoubt No. 4 two artillery

Committee in the camp dump near the old British fort at Richmond, Staten Island.

Amongst the refuse in the camp known as "Camp Robinson's Farm" at Garrison opposite West Point, where the Connecticut men were huddled during the winter of 1779-80 and probably 1780-81, an officer's button was found having the design of a hand grasping a naked sword; surrounding which is the inscription: "INIMICA TYRANNIS." We learn from a work entitled, "Old Middlesex" that these buttons pertain to a regiment raised in Boston after the departure of the British in 1776. Hostile to



Plate VIII

Uniform buttons of the 1st, 2nd, and 4th Pennsylvania Battalions. Found at Ticonderoga.

tyrants they were in those days, and the button is the forerunner of the "Inimica Tyrannis" cent of 1785.

In company with Massachusetts buttons at Connecticut Village, on Constitution Island, and at West Point were found lead or pewter buttons with an heraldic eagle upon them and they appear to have had a successor in the cents of Massachusetts in 1785.

A silver-plated button of the officer variety found on our first visit to Redoubt No. 4 at West Point in the early spring of 1921 promised for a while to defy our efforts at its identification. We believe now, however, that it is attributable to the negro corps raised in New England and dubbed the "Bucks of America." Their flag, displaying a bounding stag or buck, such as is shown upon the button, is preserved in the Massachusetts Historical Society Collection.



## *Hold It*

William H. Osborn, on Silver Heart, takes a jump in the pair jumping class at the 12th Annual Garrison horse show on Saturday on the estate of Bill Brown, boxing commissioner. Photo by Harrison.

*Quarterly Bulletin*



*From a photograph taken in 1921*

WILLIAM LOUIS CALVER (1859-1940)

**W**ILLIAM L. CALVER, a Life Member of this Society and Chairman of its Field Exploration Committee, died in New York City on May 14, 1940, in his 81st year. He was born in Brooklyn, N. Y., on November 20, 1859. For ten years, as a boy, he lived at Garrison-on-the-Hudson, where he became acquainted with a local antiquarian, and developed that deep interest in history which continued throughout his life. Having obtained mechanical training in Scranton and elsewhere, he began to work for the Manhattan Railway Company in



James Kelly 646-823-8597

Research Scrapbook Folder: Hudson Highlands Estate Research. Not for publication.





Photographs by Ed Driscoll. The Fairbanks News staff photographer  
**HIS WORK IS CUT OUT FOR HIM—Robert von Ahlefeldt of Connecticut, guest at Bill Brown's, tipped the scales at 270 when he "weighed in." Here Chris Michelsen, physical director, discusses the weighty problem with Mr. Von Ahlefeldt. Bill Brown's**

	1046k
44%	<p><a href="#">Rockaway NY News 1915 00546_1.pdf</a>                  ...This contest starts at 2:35 p. m Oyster Bay Fire Co.. Oyster Bay; nterprin Hose Co.. Sea Cliff; Glen Cove ...                  ...stead. Protection Hose. No. 2. New I Hyde Park; Inwood Fire Depart intent, Inwood Pacific ng A- Ho e Glen Cove ...                  ...I , eM for alteration8. to cost \$72,200. Bay Inwood Fire Dept.. 1:02.) This con- test starts at 4:1" p m.—Woodnn re Hose Go.. Woodmere; Inwood Fire Department, Inwood; Pacific ng. A 'Hose. Glen Cove; Lynbrook Co ...                  14                  1/18/2021                  1102k</p>
44%	<p><a href="#">Wilmington DL Daily Republican 1892 08_0160.pdf</a>                  ...in ail directions through the thick crowd, carrying with them fire and panic. ix men were struck in the face or ...                  ...they died before they could be removed. Tie sparks set fire to the light gowns worn by several girls, and before the fire ould be extinguished four of the young women were seriously ...                  ...Veterans on foot; Admi- ral John A. Dulghran Garrison; Naval Post W0, ' O. A. R.; Farragutsojouiatlou, N. V.; United kPtutOH marine ...                  14                  8/7/2019                  1521k</p>
44%	<p><a href="#">New York NY Press 1894 - 3279.pdf</a>                  ...Harlem River, between 149th and IfGth street, was destroyed by fire last night. Assistant Engineer John Kelly dis- covered the flames ...                  ...In safety. The loss Is estimated at \$75,000. The fire was communicated to a large shed on the bank to ...                  ...the Port Richmond tailor who Is suspected of having set fire to at least a dozen different buildings on Staten Island ...                  ...                  ...Yonkers. A detective of the New STYLED 10RD BERR1 » Mrs. Garrison's Adopted Son As- sumes a Title Not</p>

## Bill Brown Has Opened New Gym

**Bill Brown**, the well-known referee and conditioner of men opened his new institution in the Durland Riding Academy Building on Monday. His old gymnasium on Twenty-third street has gone out of existence.

At the new place, which will be known as "Brown's Physical Training Institute" for men and women. Brown will adopt the same course of treatment that he advocates at his training farm at Garrison-on-the-Hudson, including out-door exercises and roadwork. Aside from an up-to-date gymnasium, Brown has erected handball courts on the roof. He is also forming walking classes for the morning and afternoon. Already a number of prominent lawyers and business men have enrolled as members. In the ladies' department, the new feature, body building and weight reducing, will be specialized under the guidance of Miss Loretta McCarthy.

# New Fire Breaks Out in Pope Home

Fire, which did \$8,000 worth of damage Friday night to the home of Mr. and Mrs. Francis Pope, on Philippe Brook Road, Garrison, broke out anew at 10 o'clock last night.

Miss N. Schaffer of Cold Spring was driving past when she noticed flames in the building. Stopping at the caretakers house, Miss Schaffer notified Mr. and Mrs. Jenkins, who in turn called Fire Commissioner Walsh and the Garrison Fire Department.

The firemen went to the scene and battled with the flames for two hours. It is believed that the strong winds of yesterday re-kindled the smouldering ruins.

On Friday, the main dwelling of 10 rooms, was burned to the ground. The kitchen and dining room wing, which by the period architectural design was slightly separated from the building, was saved and this was



# CONDITION



There was one thing about  
Methuselah!

He kept himself in condition. If not his great age must be a typographical error because men who neglect their bodies do not live long.

How are you treating yours? Test yourself by this formula: Are you over-eating, over-working (at a desk); are you "crabby"; are you office weary two hours before quitting time?

**Bill Brown's** Physical Training Farm is where business and professional men regain their old time vigor through the common sense methods by which the trainers of college and professional athletes enable their charges to win contests.

**Bill Brown** can give you the stamina that goes with sound health. Send for a copy of his booklet "Condition."

# Building and Cars Burned In Night Fire

Large Garage and 4 Motors  
Totally Destroyed Monday  
on Curtis Estate—Firemen  
of Three Communities Aid  
in Extinguishing Fire

(Special to The News)

Cold Spring—A large two-story frame garage and four expensive automobiles were totally destroyed last night in a blaze on the estate of Gerald S. Curtis, directly opposite the Bill Brown training farm on the Albany Post road.

The Cold Spring, Nelsonville and Garrison fire companies were called to the scene and did trojan work in subduing the flames. The cars included two Hupmobiles, a sedan and a touring, a Packard touring and an Auburn roadster. The personal effects of Edward Jaycox, employe of the estate who



George Stonebridge photo, 1900: haying at "walnut ridge"



Henry Garrison, "Highland Home"



Looking east from Walnut Ridge circa 1890. Fort Defiance in background on east side of Highland Turnpike(Rt 9)

James Kelly 646-823-8597

Research Scrapbook Folder: Hudson Highlands Estate Research. Not for publication.



It is highly possible that the pre-Contact deposits located during the Haul Road excavation constitute a site noted earlier by both Arthur C. Parker (1922) and William Beauchamp (1900). In 1900, William M. Beauchamp published his survey of known archaeological sites in New York entitled *Aboriginal Occupation of New York*. His descriptions for Putnam County were vague and sparse, but suggestive. He wrote that "the sites here are small and scattered, and though frequent on streams attracted little attention" (Beauchamp 1900:137). He also noted that all known sites in this county were near Cold Spring and "had been previously been reported by Dr. James S. Nelson." From this source, Beauchamp listed three sites to the north and south of Cold Spring. His site No. 1 was two miles south of Cold Spring, but his site No. 2 was listed as a camp a mile north of Cold Spring "where a copper knife was found." In other words, these sites were known to be present near Cold Spring, but none had been formally investigated by the New York State Museum or reported in any publications. Beauchamp's site No. 2 is important because although not formally referenced, Arthur C. Parker subsequently listed the same site (with the copper knife), in his later publication of 1922, *The Archaeological History of New York*. Parker noted the location and provided brief descriptions of seven pre-Contact sites in Putnam County (Parker 1922:671, Plate 207). His map and site locations were at a small scale (Figure 4), but his descriptions were more specific than those of Beauchamp. Notably, one of his sites (Site 4) was listed as "A campsite near Indian Brook. "A copper knife was found there" (Parker 1922:671). The reference to a copper knife shows that Parker's site No. 4 may have been the same as Beauchamp's site No. 2. Parker's mention of Indian Brook was important, because it is the clue that suggests that his site No. 4 may be one and the same as the multi-component site designated as our Area 8 excavation.

Parker showed his site No. 4 as being to the east of, and up-slope from, an inlet or indentation in the shoreline of the Hudson River, which looks to be in the approximate location of East Foundry Cove, and into which "Indian Brook flows." During the Civil War-era of foundry operations, this stream was also called "Foundry Brook" (Beers 1867). Indian Brook has a waterfall that passes to the east of the terrace 80 ft (24.4 m) above the floodplain. During the Civil War, the brook powered a large waterwheel, which served the cannon making machinery of West Point Foundry. This small terrace was also the setting of the historic, pre- and post-Civil War-era workers housing (Grossman *et al.* 1993; Grossman 1994a,

James Kelly 646-823-8597

Research Scrapbook Folder: Hudson Highlands Estate Research. Not for publication.

