

# HUDSON HIGHLANDS RESERVE CONSERVATION SUBDIVISION

## FINAL ENVIRONMENTAL IMPACT STATEMENT

Proposed Action: Approval of Conservation Subdivision

US Route 9  
Town of Philipstown, Putnam County, NY

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## **INTRODUCTION**

The following Final Environmental Impact Statement (FEIS) provides responses to comments received from a public hearing (Appendix A) and in writing (Appendix B) during the public comment period held as part of the process established under the State Environmental Quality Review Act (SEQRA). If a pertinent received comment is not included within the FEIS, it is because the same point had already been expressed within another comment that has been included. This FEIS includes responses not only in writing, but also tangible revisions to the proposed project plans, provided in Figure 1. Figure 2 shows the DEIS plan, and is provided on the following page for comparison. The primary purpose of these revisions is to reduce the potential for adverse environmental impacts identified during SEQRA review.

The greatest single change to the proposed action is the elimination of the Equestrian Center. The elimination then allowed for other significant changes. Among them are the reduction of the length of all three of the original roads, namely Highlands Trail, Forest Court and Ulmar Pond Drive. These changes resulted in a significant reduction in the amount of impervious surfaces represented by the reduction in road length, elimination of parking for the equestrian center, and the elimination of the large equestrian center building. It also allowed for the relocation of some of the houses.

Another significant change is the reduction of the lot count from 25 to 24 homes, and the reduction of the number of homes near Ulmar Pond. Despite zoning calculation discrepancies between the Project Sponsor's and the Town's consultants, the Project Sponsor has decided not to pursue any further analysis or discussions regarding the maximum number of lots allowed by the zoning law. The applicant will follow the Town Engineer's guidance and will only pursue a 24-lot subdivision. In response to multiple comments from Planning Board and community members, and to accommodate the agreed number of total number of homes (twenty-four), the applicant has eliminated three homes directly to the west of the pond. This reduction has also allowed for the design of Ulmar Pond Road to be reconfigured from a cul-de-sac to a short drive with a turnaround serving just two homes. In consequence, the ecosystem around the pond will be further protected and the proposed disturbance will be located farther away from the wildlife corridor between Ulmar Pond and the Clove Creek.

Other less obvious changes are contained in the revised plan. To review them, this discussion starts at the intersection of Route 9 and Highlands Trail, and proceeds into the property ending at the emergency access easement at the southern end of the property. Planned improvements for the proposed entrance from Route 9 now include a left turn lane into the project. Along the entry road, the drainage facilities have been modified to incorporate the recommendations of the Town Engineer. Where Highlands Trail reaches the top of the hill, a left turn will lead to the former Frisenda house that originally was to be utilized as a maintenance building. It will now be adapted to be used as one of the 24 houses in the community, eliminating the construction of one new home. Proceeding southerly and easterly along Highland Road, the new plan provides a modified profile that reduces the amount of excavation (cut and fill) necessary to construct the road.





02.2022 HHR SCHEMATIC MASTER PLAN

Figure 1



The first intersection along this portion of Highland Trail has been designated Forest Court. Compared to the plans contained in the DEIS, this road has been shortened by approximately 1,000 feet, and three homes have been removed. It will now provide access to two homes instead of five as shown in the DEIS plans. This reduction in length requires less grading. The houses that were previously shown on Forest Court have been relocated and will no longer require pumping to deliver septic effluent to the common septic system.

Moving farther along Highland Trail, the next intersection is with Ulmar Pond Drive. It will proceed southwesterly and provide access to two houses, instead of five as shown on the plans that are part of the DEIS. Three homes have been removed from the southern and western sides of the pond, opening up a connection between conserved areas on the eastern and western sides of the project site. This road has been shortened by approximately 275 feet, and the cul-de-sac design has been replaced with a modified hammer head turn-around.

The third intersection with Highland Trail is Reserve Road. This is a new road that connects Highland Trail to the emergency access route from Horton Road. It is 620 feet long and occupies essentially the same location as the driveway originally proposed for the equestrian center. It provides access to four lots and the historic barn that will be repurposed as a community building.

The last portion of Highlands Trail lies between Reserve Road and the cul-de-sac at the end of Highland Trail. It is now 140 feet long, approximately 250 feet shorter than originally proposed. In addition to shortening the road, this change also allowed the designers to regrade the road, further reducing the excavation required to construct it.

In summary, the road system is now approximately 900 feet shorter than that shown on the plans included in the DEIS. Six homes have been removed/relocated, three from the shortened Forest Court, and three from Ulmar Pond Drive. Of these six, one has been replaced by the former Frisenda house, and four have been relocated to the area originally proposed to be occupied by the equestrian center. One has been eliminated entirely. In addition, one home originally proposed at the end of the Highland Trail cul-de-sac has been shifted to a lower part of the cul-de-sac into an area originally proposed for the equestrian center.

These changes have significantly reduced the level of the potential adverse environmental impacts including the following:

Table 1: Changes in Potential Impact			
ITEM	DEIS PLAN	FEIS PLAN	NET CHANGE
Site Disturbance	45.7 acres	38.1 acres	Decrease 7.6 acres
Impervious Surfaces	11.1 acres	7.7 acres	Decrease 3.4 acres
Total Excavation (gross cut fill)	28,792 CY spoil	10,487 CY spoil	Decrease 18,305 CY spoil
Water Demand	24,000 GPD	17,700 GPD	Decrease 6,300 GPD

Finally, the amount of land that will be made subject to the proposed Conservation Easement has been decreased from 170.8 acres to 163 acres. This, however, does not mean that more land is being developed. As noted in the table above, the actual amount of land being disturbed has been reduced by approximately 7.6 acres from 45.7 acres to 38.1 acres. The DEIS plan identified 170.8 acres to be included in the Conservation Area, which included 11 acres within the area identified for the planned equestrian center that was proposed in accordance with recreational uses allowable within Conservation Areas. The area of the Conservation Area outside the Equestrian Center had would have therefore been 159.8 acres.

However, the Conservation Area originally included areas where some of the permanent stormwater management practices are to be located, the primary subsurface sanitary disposal field, and the early nineteenth century barn. Being considered instead as features of the “developed” landscape, these areas have now been removed from the proposed Conservation Area. The proposed boundaries of the Conservation Area were then expanded to add new areas no longer being developed by shortening Forest Court, the end of Highland Trail and Ulmar Pond Drive. The required area to be made subject to a Conservation Easement is 154.1 acres as provided in the Conservation Findings, Appendix B of the DEIS. The net result is that the modified 163-acre Conservation Area still exceeds the required minimum area, has increased the amount of acreage truly being conserved beyond the original area without the equestrian center, and includes additional area for wildlife habitat around and across the southerly portion of Ulmar Pond, north of Forest Court, and east of the Highland Trail cul-de-sac.

Responses to specific comments follow below, arranged by the order of the DEIS.



**I. EXECUTIVE SUMMARY**

**Comment 1.1 (AKRF):** The impact summary table included in the Executive Summary should include a note regarding the significance of the impact cited for the 24,000 gpd water demand from the proposed project.

**Response 1.1:** Table 3 in the DEIS (p. 67) shows an expected water usage volume of 24,000 gpd (rounded) and includes a 15% safety factor. This volume represents 13% of the estimated daily recharge rate of 179,641 gpd. The revised plan no longer includes an equestrian facility, which was expected to demand 4,675 gpd or 5,376 gpd if the 15% safety factor is applied.

Additionally, one of the two “other buildings”, the former Frisenda residence, will not be used as a maintenance facility as originally planned. Rather, it will be one of the 24 residential units. Accordingly, the early 19<sup>th</sup> century barn, which will be adaptively reused to serve as the community center, will now be the only “other” building. This will further reduce the anticipated water demand by 200 gpd (the difference between the use of the home being eliminated and the use of a maintenance facility), or 230 gpd when the 15% safety factor is applied.

As summarized in the tables that follow, the total water demand has been reduced from 24,000 gpd to 17,700 which represents a 26% reduction in anticipated demand, reducing the demand to 9.8% of the anticipated daily recharge rate.

Table 2: Change in Water Demand as a Result of Design Change			
<b>Change in Water Demand as a Result of Design Change</b>			
Original Water Demand Estimate including 15% safety factor (gpd)			24,000
Source of Demand Reduction	Original Estimate (gpd)	Safety Factor (15%) (gpd)	
Equestrian Facility	4675	701	(5,376)
Frisenda House (Lot 1)	200	30	( 230)
Lot 25	600	90	( 690)
Revised Water Demand (gpd)			17,704
Revised Water Demand (gpd) Rounded			17,700

Table 3: Original and Revised Demand as a Percent of Daily Recharge (gpd)				
	Demand	Daily Recharge	Demand as a Percent of Daily Recharge	
Original Demand (gpd)	24,000	179641	13.4%	
Revised Demand (gpd)	17,700	179641	9.8%	

The total daily water demand that was anticipated in the DEIS (13.4%) was small when compared to the site’s daily groundwater recharge rate. The 26% reduction in the overall

demand to 9.8% of the site's daily groundwater recharge rate reduces the demand to the greatest practical extent.

The 17,700 gpd anticipated water use includes the demand from two existing houses and the commercial building on Route 9. These demands are current demands that will continue regardless of whether the Hudson Highlands Reserve is built. As shown in the table that follows, the actual increase in daily water demand is 15,500 gpd over the existing demand that will continue.

Table 4: Anticipated Demand Adjusted for Existing Demand (gpd)			
Revised Demand (See above)			17,700
Existing Demand			
Source	Demand	15% Safety Factor	
Frisenda House (Lot 1)	600	90	-690
Ulmar House (Lot 20)	450	67	-517
Commercial Building	920	138	-1,058
Anticipated increase in demand			15,435
Anticipated increase in demand (Rounded Up)			15,500

After considering the net reduction in demand as a result of the elimination of the equestrian center and the allowance for existing demand that will continue, the impact actually associated with the approval of the Hudson Highlands Reserve is 15,500 gallons per day or 8.6 percent of the daily recharge. Whether the demand is 8.6% or 13% of the daily recharge, it is a small demand on the available supply.

**Comment 1.2 (AKRF):** If an impact summary table will carry over to the FEIS, an additional column noting where within the document the discussion/analysis relevant to each topic can be found.

**Response 1.2:** The revised impact summary table (Table 5) follows on the next page. An additional column has been added to identify where within the document the discussion/analysis relevant to each topic can be found.

**Comment 1.3 (AKRF):** The third paragraph found under B.1.b includes a currently unsupported statement that Ulmar Pond will actually be in better condition after the proposed project is developed" due to the retention of a lake management firm through the HOA. We note an inconsistency in that later in the DEIS (Section IV.A.2.a.ii), this same statement is prefaced with the phrase "the project sponsor believes..." which is more appropriate.

**Response 1.3:** The Project Sponsor believes the pond will actually be in better condition after the project is developed than it is now. The pond is currently suffering degrading conditions that can only be corrected through active management, such as will occur with the proposed HOA. Currently the pond is not actively managed, and is experiencing excessive nutrients, algal blooms, and imbalanced biological communities (phytoplankton, zooplankton, fish and aquatic plants). Following development, it is envisioned that the HOA will engage with a professional lake management firm to actively address these ongoing issues and manage the pond as this is

Table 5: Summary of Impacts

Topic	Identified Impacts	Proposed Mitigation	Notes	Discussion/Analysis
Water Resources: Stormwater Runoff	6.7 acres of new impervious surfaces (one acre existing)	Stormwater Management System to reduce runoff rate to below pre-existing conditions	Adverse impacts have been reduced to the greatest practical extent	Section III-A.1, generally and Responses: 1.3, 2.33, 2.45, 2.77, 2.80, 2.92, 3B.11, 3B.68, & 5.2
Water Resources: Ulmar Pond & Clove Creek	No impact	Providing 140' buffer around pond under conservation easement, reduced number of new homes from 7 to 4	Adverse impacts have been reduced to the greatest practical extent	Section III-A.2, generally and Responses: 1.3, 2.18, 2.19, 2.20, 2.54, 2.70, 2.83, 3A.10, 3A.12, 3A.13, 3A.14, 3A.15, 3A.16, 3A.21, 3B.6, 3B.24, 3B.25, 3B.38, 3B.48, 3B.50, 3B.52, 3B.54, 3B.61, 3B.63, 3B.65, & 3C-1
Water Resources: Groundwater	17,700 gpd demand (15,500 new demand)	None	Average recharge of 179,641 gpd is 11.6 times the increase in demand	Section III-A3 generally and Responses: 1.1, 2.74, 2.77, 2.84, 2.99, 3A.11, 3B.52, 5.1, 5.2
Water Resources: Floodplains & Wetlands	No impact	None	No floodplains or wetlands are proposed to be disturbed	Section III-A4 generally and Responses: 2.18, 2.20, 3B.6, 3B.24, 3B.70
Vegetation & Wildlife	Conversion of 38.1 acres of Natural vegetation/wildlife habitat to 30.4 acres of Lawn/landscaping and 7.7 impervious acres	Permanent preservation of 163 acres of undisturbed forest and wetland habitat via a conservation easement.	Adverse impacts have been reduced to the greatest practical extent.	Section III-B generally and Responses: 2.18, 2.19, 2.20, 2.33, 2.46, 2.50, 2.51, 2.54, 2.55, 2.59, 2.62, 2.64, 2.66, 2.69, 3A.9, 3A.10, 3A.27, 3C.3, 3D.4, 4.2, 4.9, 5.1 & 5.2
Zoning & Land Use	No impact	None		Section III-C generally and Responses: 2.17, 2.23, 2.18, 2.24, 2.27, 2.28 2.29, 2.32, 2.33, 2.54, 2.55, 2.71, 3A.5, 3B64, 4.1, 4.4, & 4.11
Community Character	Visual impact limited to view of entrance road from US Route 9	None	No structures will be visible from trails or nearby properties	Section III-D generally and Responses: 2.71, 2.89

an important resource for the community. Further, the onsite subsurface sanitary disposal systems for the existing home at Ulmar Pond and the early 19<sup>th</sup> century barn (which currently contains a residence) will be abandoned, with sewage collected in a sewerage system that will be directed to a disposal field far removed from the pond. As runoff from developed surfaces will also be directed to stormwater management and treatment facilities prior to entering Ulmar Pond, the pond is not expected to experience any adverse increase in nutrient loading to exacerbate the existing degraded conditions. The proposed management of the pond is therefore not being proposed to mitigate any anticipated impacts, but rather to improve the existing condition.

**Comment 1.4 (AKRF):** The discussion of the existing architecturally significant house and barn on the property first appears in the DEIS as the fourth paragraph on page 24. The text indicates that the house "will remain on one of the Hudson Highlands Reserve residential lots" and that the barn will be "restored and adaptively reused for meetings by the HOA." AKRF has reviewed the previously issued letters on the proposed project from the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP). The FEIS should refer to these letters while clarifying that the 1920's home and the 1825 barn have been identified as architecturally significant through extensive site surveys and consultation with OPRHP, and that the proposed adaptive reuse of the barn will be designed through close coordination with OPRHP as development of the proposed project progresses. The existing language in the DEIS regarding historic significance seems to indicate that the determination of architectural significance was made by the Applicant without consulting with OPRHP, which is not the case. The applicant should provide the Planning Board with written concurrence from the SHPO that the proposal to adaptively reuse the barn is acceptable.

**Response 1.4:** Both historic structures will be utilized. The 1920s home will be renovated and sold as one of the 24 residential units. The early 19<sup>th</sup> century barn will be adapted for reuse as a community center. The Project Sponsor's architectural historian identified both structures as being architecturally significant as part of a survey conducted in 2015. This survey was submitted to OPRHP. In a letter dated May 17, 2016, OPRHP indicated that the result of their review was that only the barn was eligible for listing in the State and National Registers of Historic Places. As requested by OPRHP, plans for this adaptive reuse will be developed in consultation with OPRHP. It is not necessary to coordinate with OPRHP on the renovation of the house.



## II. DESCRIPTION OF THE PROPOSED ACTION

### A. Project Purpose, Public Need and Benefits

**Comment 2.1 (Conservation Board):** Plans for HHR call for 10 of the 40 horses at the Equestrian Center to be owned by HHR and available to the public for riding, training, and similar use, at an unstated but presumably market-rate commercial fee. The fact that the public will be able to pay commercial rates in order to use the Equestrian Center is the primacy public benefit identified by HHR in its Draft Environmental Impact Statement (the "DEIS"). The DEIS implies that there are not other equestrian centers available for public use, although such centers appear to be available elsewhere in Putnam and Dutchess Counties. The remaining 30 horses will be owned and stabled at the Equestrian Center by individuals who have purchased one of the 25 lots in HHR and built a house there.

**Response 2.1:** The Equestrian Center has been removed as an element of the proposed project.

**Comment 2.2 (Merante):** How was it determined that "as urban incomes have grown, access to and engagement with horses on any level." there is a need to satisfy demand for such facilities.  
"to satisfy a local need . . . facility-owned school horses in service of a comprehensive high-quality program for local children who are eager to participate in [horse activities]"

**Response 2.2:** The Equestrian Center has been removed as an element of the proposed project.

**Comment 2.3 (Merante):** Where are the studies establishing a "public need for the project. . ." Where are the studies establishing that there is a significant second-home demand in the Hudson Valley?  
And a "long established pattern of second-home demand in (sic, Philipstown)? How is the fact that "Philipstown is part of an area that is easily reached from New York City, where city residents buy a second home while choosing to continue to rent in the city," relevant to the creation of a conservation subdivision?

**Response 2.3:** The Project Sponsor's market analysis deems Putnam County as a target for second home buyers as it is relatively close to Manhattan. Studies have indicated that people in Manhattan looking to purchase property are more likely to purchase a second home in this area versus a primary residence in the City because their investment goes further. In addition, there have been trends in the home buying market towards more sustainable properties which this conservation subdivision provides. Lastly, since the public hearing and the market analysis, there has been a surge in people moving out of the metropolitan area and to nearby upstate towns, largely fueled by the covid crisis. The anticipation is that this trend will continue over the next few years and a demand for inventory will increase.

**Comment 2.4 (Merante):** Is there, or has there been, an explicit call for "new housing stock in Philipstown."

... especially on the price scale as described in the project information and on such sensitive land?

**Response 2.4:** The Project Sponsor's market analysis and current trends in the housing market show an increased demand for inventory outside of the metropolitan area. This demand has further increased since the onset of the covid crisis. The proposed area of development has been further revised in order to preserve the most sensitive land, and only build on land that is most appropriate for development. The proposed properties were initially priced higher than the local housing market. However, the anticipation was that for a newly constructed, energy efficient, sustainable home, a buyer would be willing to invest more. Based on more recent market analysis, the price point of these newly constructed, energy efficient, sustainable homes is now in line with other current housing stock in the vicinity.

**Comment 2.5 (Merante):** . has there been an expressed call for increased tax revenue [for what need?] - and what is the particular benefit of "commercial taxes?"

**Response 2.5:** The Equestrian Center has been removed as an element of the proposed action. There will therefore not be any increase in "commercial taxes". However, all residents of the development will pay state and local taxes therefore providing increased revenue to Philipstown. Although there may not be a direct call for increased tax revenue, increased revenue would provide additional funding for the town to use and therefore be positive.

**Comment 2.6 (Farrell):** And it struck me on page 27 under A2 public need for the project and benefits, that the applicants did not discuss the public needs of Philipstown residents, but the needs of New York City residents, which was puzzling.

**Response 2.6:** The Project Sponsor anticipates that future homebuyers would be a mix of residents new to Philipstown, and current Philipstown residents looking for new housing. The future homebuyers all will be Philipstown residents. As previously stated, all homeowners will be paying taxes and therefore contributing to Philipstown and its residents. Another benefit of the proposed project is that the design limits development to 38.1 acres, and permanently preserves 163 acres of forest, wetland, and watercourses in its natural state, which preserves the existing character of Philipstown.

**Comment 2.7 (Rae):** When I first was looking into the LLC that is behind this project, I was taken aback that they didn't put their names to it, and it was a blind LLC. So I looked at the architect whose name is on the whole filings, and his address matches the address of the LLC. It's the same one. It's in the New York 91st Street. And also that address is shared with the construction company.

So, right now, I know who the developers are, and who they are because they are all living together and working together in New York City. And not that that's a crime or that shouldn't be done or developed, but it seems to me that these people can move this development anywhere the cons tonight outweigh the pros. They live in New York City. They are just looking for a place to put an equestrian subdivision. Equestrian subdivisions are the latest fad in subdivisions in America, California, Texas, Florida, the Carolinas. Golf subdivisions now are played; they are saturated.

So, now, they are doing subdivisions with horses. And these are first-time builders of this subdivision. If you go on the architect's website, there's not a one-acre home development on the site. The construction company, there's not a 25-home one-acre development. There's not an equestrian center. The architect says on the site that he is the general contractor of all of these projects which include homes interiors. So I don't know how this is our first project. And it seems to me we have to trust these first-term developers who are just looking for a fad. They are just developers to make money, promising us a lot of tax dollars. But if this development turns into a 501C, does that have an implication on our tax dollars?

**Response 2.7:** Ulises Liceaga, the Project Sponsor, is a homeowner in the Town of Philipstown. It is common practice to place development projects in their own LLC to isolate any liability from other holdings. The Equestrian Center has been removed as an element of the proposed action. The project is now a 24-lot conservation subdivision.

## B. Conservation Subdivision Design and Layout

**Comment 2.8 (Conner):** How many

- Existing structures including dwellings
- Existing dwellings
- Proposed new structures including dwellings
- Proposed new dwellings including any caretaker residences for the equestrian facility
- Proposed structures related to the equestrian facility
- Proposed structures related to sewage treatment facility
- Parking spaces for cars for the equestrian facility
- Parking spaces for horse trailers for the equestrian facility
- Parking spaces for other purposes unrelated to the equestrian facility

**Response 2.8:** The following tables show the number of structures and parking spaces under the original proposal and as currently modified. The modified proposal reflects the elimination of the Equestrian Center and other changes.

	Existing Conditions	Change based on DEIS Plan	DEIS Plan Total	Change between DEIS and FEIS	FEIS Plan Total
Existing Dwellings	3	-2	1	1	2
New Dwellings	0	24	24	-2	22
Barns Includes Equestrian Facility	1	0 <sup>(2)</sup>	1	-1	0
Community Bldg. (HOA, former Barn)	0	1	1	0	1
Garages & Service Bldgs.	1	1	2	-1	1
Commercial Bldgs.	1	0	1	0	1
Sewage Treatment Facility	0	0	0	0	0
Totals	6	24	30	-3	27

<sup>(1)</sup> Excludes existing minor out buildings and ruins

<sup>(2)</sup> Net of conversion of Existing Barn to HOA building and addition of Equestrian Building

Table 7: Inventory Parking Spaces <sup>(1)</sup>					
	Existing Conditions	Change based on DEIS Plan	DEIS Plan Total	Change between DEIS and FEIS	FEIS Plan Total
Dwellings	6	48	54	-6	48
Equestrian Facility (Autos)	0	24	24	-24	0
Equestrian Facility (Trailers)	0	4	4	-4	0
Community Bldg. (HOA, former Barn)	2	4	6	0	6
Commercial Building	45	0	45	0	45
Totals	53	80	133	-34	99

<sup>(1)</sup> Excludes garaged spaces

**Comment 2.9 (Conner):** Which of the four LEED building rating systems will the development be built under?

- LEED for Building Design and Construction
- LEED for Interior Design and Construction
- LEED for Building Operations and Maintenance
- LEED for Neighborhood Development

**Response 2.9:** According to the Project Sponsor, the Project will be utilizing “LEED for Homes”, which is described as being appropriate “for single family homes, low-rise multi-family (one to three stories) or mid-rise multi-family (four to six stories).”

**Comment 2.10 (Conner):** Which structures will be built to LEED standards? (please list all)

**Response 2.10:** According to the Project Sponsor, all 22 new residences will be built to LEED for Homes standards.

**Comment 2.11 (Conner):** What level of LEED certification will these structures be built under?

- Certified
- Silver
- Gold
- Platinum

**Response 2.11:** The Project Sponsor’s goal is to achieve LEED Platinum.

**Comment 2.12 (Conner):** How many square feet for each proposed new dwelling? (please list all)

**Response 2.12:** Each of the 22 new private residences will be approx. 2,500 – 3,000 square feet.

**Comment 2.13 (Conner):** How many square feet for each proposed structure related to the equestrian center? (please list all)

**Response 2.13:** The Equestrian Center has been removed as an element of the proposed project.

**Comment 2.14 (Conner):** How many square feet for each proposed structure which is not a dwelling nor related to the equestrian center? (please list all)

**Response 2.14:** The only non-dwelling structure on site will be the Clubhouse. It will be a modification of the existing early nineteenth century barn. The final design is anticipated to be between 2,500 – 3,000 square feet, similar to the size of the individual dwellings.

**Comment 2.15 (Conner):** What is the estimated annual energy consumption for each structure, existing and proposed, including heating and cooling? (please list all)

**Response 2.15:**

The existing structures on the property are not habitable at this time. The intention of the applicant is to completely renovate them, which includes a mechanical, electrical and plumbing (MEP) overhaul. In addition, the applicant plans to install new insulation, windows and finishes. All of these elements will contribute to the LEED certification process and the energy consumption of the existing structures. Therefore, the applicant cannot provide documentation as to the energy consumption at this time. As originally stated, the applicant's target LEED for homes rating is platinum. Based on the United States Green Building Council (USGBC) guidelines, there are several factors that go into achieving this rating, MEP systems being one of them. Without detailed information from private homeowners in the Hudson Valley, the applicant cannot calculate the energy consumption of a regular home versus a LEED platinum home. The applicant has based their anticipated reduction on literature from the USGBC, which is the governing body for LEED certification. The updated reduction in energy is between 20-60 percent according to this summary. More information on the benefits of LEED certified homes can be found here: <https://www.usgbc.org/leed/rating-systems/residential>

**Comment 2.16 (Conner):** Will there be swimming pools and if so, how many and what size, i.e., what are the dimensions and how many gallons will each hold? Will they be heated? Will their cleaning methods and effluent be controlled by the HOA?

**Response 2.16:** The HOA Residential Design and Maintenance Rules and Regulations prohibit exterior swimming pools (both in-ground and above ground). The two current prototypes show private indoor pools ranging from 200-500SF with 9,000-22,500 gallons of water. These pools would be heated. The rules and regulations also recommend natural pools versus traditional chlorinated swimming pools. System maintenance is the responsibility of each individual homeowner.

**Comment 2.17 (Scenic Hudson):** As proposed, Hudson Highlands Reserve does not adequately meet town code requirements for, nor the generally accepted definition of, a conservation subdivision. As we stated in our February 15th, 2018 letter, rather than cluster homes in a compact arrangements, the applicant proposes homes spread out along multiple cul-de-sacs. The large house lots sprawl across the entire western half of the property, dividing remaining natural areas into three separate sections. This would result in forest fragmentation and would not protect the important habitat values found on the site. This is inconsistent with Philipstown's zoning, which requires that:

*"The configuration of the open space land and dwellings shall not result in fragmentation of the open space land in a manner that interferes with its proper management and protection of its conservation values." (Section 175-21 A(3)(b))*

**Response 2.17:** The Town Code states "a variety of lot sizes" may be in a conservation subdivision and the Planning Board, absent more detailed restrictions must follow the Town Code (Town Code § 175-19.B). The proposed subdivision complies with the Philipstown Town Code, which describes conservation subdivisions as follows:

*"In conservation subdivisions, units are clustered or sited on those portions of a property most suitable for development, while leaving substantial portions as undeveloped open space. Conservation subdivisions may include a variety of lot sizes, ranging from large farm or estate lots to small hamlet-size lots. Conservation subdivision results in the preservation of contiguous open space and important environmental resources, while allowing compact development, more walkable neighborhoods, and more flexibility than conventional subdivisions. Conservation subdivisions must satisfy the standards in § 175-20." (Town Code § 175-19.B.)*

As required by the Town Code, the proposed project started with the preparation of a Conservation Analysis, from which the Town Planning Board determined areas of the property that were considered to have high, medium, and low conservation value. As can be seen in Figure 4, the proposed layout concentrates development within areas determined to have low conservation value (the "most suitable for development"), with minor intrusion into medium conservation value areas. About 77.6% ("substantial portions") of the property is proposed to be set aside in its natural state and protected, as required by the Code, under a Conservation Easement. All proposed preserved areas are interconnected, and therefore, by definition, contiguous open space. Town Code §175-20 details a long list of requirements, by which the proposed project has been designed and fully complies.

**Comment 2.18 (Audubon):** When "conservation building designs" were first introduced they seemed to *be* a solution to rampant sprawl. The reality is that the lands the projects set aside as "conservation areas" are usually areas that are unbuildable anyway. They are devoid of the very resources that native plants and wildlife need to survive. The habitats used for the building areas are the ones that animal species need.

**Response 2.18:** The area proposed to be set aside includes areas absent of environmental constraints such as steep slopes and wetland areas. Alternative B depicts an as-of-right conventional subdivision with numerous homes that would be developed within the area currently proposed to be set aside under a Conservation Easement. The area proposed to be conserved was chosen as a result of a comprehensive Conservation Analysis that included consideration of high value native vegetation associations and wildlife habitat. The proposed Conservation Area includes the most valuable habitat areas including the Clove Creek and adjacent floodplain, Ulmar Pond and adjacent uplands, all the watercourses and wetlands within the property boundaries, adjacent uplands to the wetlands and watercourses, and the areas with the highest diversity of undisturbed native vegetation. The proposed development area includes the portions of the project site with the highest percentage of invasive plant species, and none of the high value wildlife habitat listed above.

**Comment 2.19 (Schuster):** I am commenting on the DEIS prepared for the Hudson Highlands Reserve, proposed to become Philipstown's first "Conservation Subdivision." This is a laudable concept and one that should help our communities live sustainably into the future, while conserving our natural resources, if implemented appropriately. To qualify as a CS, the zoning code states that such projects must preserve contiguous open space and must protect the areas with the most conservation value- in other words those habitats critical for maintaining populations of our native species that are of special conservation concern.

My two concerns are, first that the project as proposed fails the contiguous conservation criterion by establishing a barrier dividing the conserved parts of the project area, and second that the environmental studies to date fail to adequately address the local amphibian and reptile species of highest conservation concern, and the habitats required by these species.

**Response 2.19:** Regarding the commenter's first concern, all areas proposed to be conserved are interconnected within the project boundaries, as well as through offsite natural habitats. As seen in Figure 1, the revised layout absent the Equestrian Center enhances this connection when compared to the DEIS Plan in Figure 2. The Project Sponsor believes that the proposed development also does not present a "barrier", as a large amount of the existing vegetation will be preserved by design, including tree canopy, and will continue to be porous to wildlife movement.

Regarding the commenter's second concern, while not all suspected herpetological species were observed, their presence is assumed and addressed. Those areas most suitable for their life cycle, especially Ulmar Pond, watercourses, wetlands, and adjacent uplands, are proposed to be preserved in their entirety under a Conservation Easement.

**Comment 2.20 (Schuster):** Second, the development of the property should be shifted by some additional clustering of some house locations - especially moving them away from the edge of Ulmar Pond - thereby providing for east-west ecological connectivity. The proposed houses and roads are now laid out in a contiguous north-south line that effectively divides the site by a wildlife-inhospitable barrier. The need to maintain east-west connectivity is amplified by the fact that there are large parks not far to the east- Fahnestock SP- and west- Hudson Highlands SP. And Ulmar Pond is nearly encircled by these developed lots and thus is cut off from the surrounding uplands needed for a healthy pond environment.

As ecological science and conservation have developed in recent years, it has become clear that if we want a future that will still include most of our native wildlife species we must pay more attention to connectivity than we have in the past. This will require conserving connectivity where it exists, mitigating barriers where they exist, and certainly not creating new barriers to wildlife movement.

**Response 2.20:** As stated in Response 2.19, the proposed development would preserve a significant amount of natural vegetation and tree canopy by design, and will therefore still permit wildlife passage. As seen in Figure 1 and Figure 12, the number of proposed homes around Ulmar Pond has been reduced from eight (as seen in the DEIS Plan in Figure 2) to five, of which one is pre-existing, and is located around the northern third of the pond. No development is proposed around the southern two-thirds of the pond, which includes the inflow from a watercourse/wetland system and the outflow to the Clove Creek. The removal of homes from

the southern edge of Ulmar Pond increases the amount of natural connection between the preserved areas on the eastern portion of the property with the preserved areas on the western portion around Clove Creek.

The lots proposed around Ulmar Pond are separated from the edge of the pond by a 140-foot buffer of existing natural vegetation, which will be maintained undisturbed. As currently shown on the plans, the homes themselves will be situated further beyond the 140-foot buffer (from 171 feet to 277 feet from the edge of the pond, and at an elevation of between 30 and 50 feet above the pond). The Project Sponsor maintains that the modified layout would have no significant impact on east-west ecological connectivity with Ulmar Pond. The connection between Ulmar Pond and Clove Creek would be preserved with the preservation of the watercourse and surrounding wetlands that drains Ulmar Pond to the Clove Creek. As is explained in more detail elsewhere in this FEIS, it is the collective opinion of the Project Sponsor's ecological and natural resources consultants that the 76% slope above which the homes would be located presents a greater deterrent to wildlife movement than the proposed homes.

As presented in the FEIS, the Project Sponsor has stated that the proposed road system and siting of homes on lots would not create an environment inhospitable to wildlife movements through the property. Undeveloped natural connections will remain within the project site both north and south of the proposed area of development, and the proposed layout anticipates preserving as much of the existing vegetation and tree canopy as possible, without fencing. While there may be some deterrents such as lightly used paved roadway, wildlife would still be able to move freely through the proposed area of development from one side to the other.

**Comment 2.21 (Flinn):** I'm here tonight, particularly, because yesterday our state legislature enacted the Climate Leadership and Community Protection Act, which the governor has now signed into law... We are here this evening, of course, to consider the environmental impacts of a proposed -- proposal to build 25 houses on what is essentially undeveloped forest land abutting the pond and fishing stream. This project is not designed -- needed affordable housing for full-time residents of our community, nor is it designed to attract, apparently, well-to-do New - - New York City families seeking second homes, many of whom will likely drive back and forth on the 50-plus miles each way in cars emitting exhaust and gasoline engines. And when they're here, they won't be walking across the street to Food Town for their groceries. There will be 25 additional gas-emitting cars driving to town, seeking space in the Food Town parking lot. How will their new second homes be heated? Their city homes, by the way, will likely remain heated while they are up here. With oil, propane, maybe, electric heat pumps, I hope. And if it is heat pumps, where will they get their clean and generated electricity? There's nothing in the site plan indicating a solar array.

**Response 2.21:** The Project's intention is to achieve LEED Home Platinum for each dwelling unit. LEED for Homes has strict guidelines regarding energy use. Studies have shown that LEED Platinum homes can reduce their energy consumption by 50-60%. Heating and cooling strategies that use Geothermal Exchangers, Energy Recovery Ventilation (ERVs) and PVT heat exchangers have been considered. It is intended to centralize all systems in the home to provide more efficient operations. Wherever possible, ENERGY STAR rated equipment will be used, which is also a requirement of LEED Homes. Construction means and methods will be



used that contribute to energy efficiency in the homes. These include high performance windows, wall insulation and sealants to avoid air leakage.

Residents will be permitted to install solar collectors at their discretion. Page 49 of the HOA Residential Design and Maintenance Rules and Regulations outlines the requirements and approval process for individual installations and use.

**Comment 2.22 (Galler):** I want everybody to look at the economics of the project. The housing market is flat. And it's probably going to remain flat, not so much abuse of economy, but we no longer have the \$10,000 deduction. And millennials really don't want houses. So, all of a sudden, we have a complex that has intense mitigation that needs to be kept up continually. What happens if only two houses are sold or even only 10? Is this feasible? Who is going to take care of it after that?

**Response 2.22:** Since the time of this hearing, the market has shifted once again, largely due to the covid crisis. There is a greater demand for homes in rural and suburban areas and therefore an increased need for inventory. It is not planned to build all 22 new homes immediately, but base the construction schedule off market demands. In the Project Sponsor's opinion, current and projected market conditions support the full buildout of the subdivision as currently planned. During the construction phase of this project the site will be maintained by the Hudson Highlands Reserve LLC. Once the site is operational, maintenance will be transferred to the HOA which will develop their own annual budget for the site maintenance [HHR By-Laws and Protective Covenants Article VII - Budgets, Common Charges, and Special Assessments].

**Comment 2.23 (Deneher):** The houses, will they in fact become Airbnbs? What volume could be there?

**Response 2.23:** Uses not specifically permitted in the Town of Philipstown are deemed prohibited. Vacation rentals, including airbnbs and other short-term rentals, are not permitted anywhere in the Town of Philipstown. The only facilities defined in the Town Code to provide lodging for transient guests include bed-and breakfast establishments or lodging facility, including hotel, motel or inn. Under the Town's Use Table, 175 Attachment 1, lodging facilities are not permitted in the RR Zoning District, and bed-and-breakfast establishments are permitted only pursuant to site plan review. Vacation rentals, such as airbnbs and other short-term rentals, are not permitted on the property because they are not permitted in the Town of Philipstown pursuant to the Zoning Code. However, to make this point clear the Applicant will add an additional restriction to the HOA Declaration stating that each residential lot shall be used as a single-family home only. Such properties may be leased by the home owner to a tenant for a period of not less than 1 month.

## **B.1. Residential Subdivision**

### **B.1.a. Lot count**

**Comment 2.24 (Gainer):** Conservation Subdivision Standards - The project's design and layout must comply with all requirements of §175-20 of the Town's Zoning Ordinance. Based upon the current design plans for the project, the applicant should clarify how the following standards are met:

Project Density - Pursuant to §175-20B(l), the applicant has utilized a formula, taking into account the various environmental constraints existing on the tract, in order to establish a permitted overall project density. Through this calculation, they believe that a residential housing count of 25 lots overall is permissible.

As the Board is aware, my office previously reviewed the environmental constraints mapping to evaluate the application of this formula on the subject project, and through this we established that the overall permitted project density utilizing the "formula method" allowed in the Ordinance is 24 units, considering the entire tract (including the property within the "M" zoning district).

**Response 2.24:** The Town Engineer has developed an assessment that the allowable count for the project is 24 units. The Project Sponsor's designers reported that they revisited their calculations and measurements that resulted in an affirmation of their original conclusion that the allowable number of residential lots is 25. Nevertheless, the applicant has instructed its designers to accept Mr. Gainer's calculation of 24 residential units to remove any question regarding the number of units and eliminate any negative impact that the 25<sup>th</sup> unit would have caused. Accordingly, the designers have adjusted the plans, which now show a total of 24 residential lots.

**Comment 2.25 (Gainer):** Further, if it is determined that no density should be assigned to these "M" district lands (since residential uses are not permitted in the Chapter 175 "Use" Table for this zone), the permitted project density would then be reduced to 22 units.

**Response 2.25:** Among the applications before the Town is a petition to the Town Board, dated May 16, 2017, to rezone that portion of the Hudson Highlands Reserve property presently within the M-Zone and a portion of the property presently within the HC zone to RR (Rural Residential). The M-Zone reflects the former potential use of the property as a quarry, which is no longer plausible on the project site or consistent with surrounding development. In the Project Sponsor's opinion, a land use rationale therefore exists to support the zoning change for the portion of the property currently zoned M.

**Comment 2.26 (Gainer):** In summary, as the design and layout of the project plans evolve, this analysis of "constrained lands" must again be reviewed to establish with finality the permitted density for the overall tract. Further, with the provision of the equestrian center, it must be determined whether any resident accommodations will be provided for this amenity and whether this too must be considered against the dwelling count ultimately established for the property.

**Response 2.26:** Please see Response 2.24, above with regard to the constrained lands and permitted density.

As a result of the SEQRA review and analysis, the equestrian center has been removed from the plan. Therefore, further review regarding resident accommodations provided for it is not necessary.

**Comment 2.27 (AKRF):** Regarding residential density, and the site plan modifications recommended above, please note, from Town Code Section 175-20 — Standards for Conservation Subdivisions: "(5) The maximum number of units as determined by this § 175-20B, whether derived from the density formula or the yield plan, and the density bonuses described in Subsection B(4) shall not be considered an entitlement. The applicant must also demonstrate compliance with all applicable criteria and standards of the Zoning Law, Land Development Regulations, and other applicable laws and regulations. These requirements may result in an actual approvable unit count that is less than the maximum allowed by Subsections B(1), (2) or (4) above."

**Response 2.27:** See Response 2.24. The Project Sponsor developed a lot count from both the density formula and the yield plan, the lower number of which was 25. The Town's consultants calculated a lot count of 24 from the density formula. The applicant has instructed its designers to accept the Town's calculation of 24 residential units to remove any question regarding the number of units and eliminate any negative impact that the 25<sup>th</sup> unit would have caused. Accordingly, the designers have adjusted the plans, which now show a total of 24 residential lots. This layout fully complies with all applicable criteria and standards of the Zoning Law, Land Development Regulations, and other applicable laws and regulations.

**Comment 2.28 (Butensky):** The law says that an applicant may increase the permitted number of dwelling units by use of density bonus granted at the discretion of the planning board. The applicants seem to think they have a right to it, but it's at your discretion. The maximum -- the formula, you know, and the density bonus is described -- as described shall not be considered an entitlement.

**Response 2.28:** No density bonus is being proposed.

**Comment 2.29 (Hammond):** Before a protest is raised that the HHR is actually entitled to 25-29 houses, using the two calculation methods cited, let's all acknowledge that that is a red herring. Expert opinion is that zoning and the land would not actually support more than 10 or 11 houses without a conservation subdivision...This means that the HHR is using a law intended to conserve and protect open space against the town itself while "preserving" land that was already preserved.

**Response 2.29:** As seen in Figure 1, the newly revised layout proposes just 24 residential lots. As demonstrated in Alternative B in the DEIS, a conventional as-of-right subdivision would yield 19 homes, with no land set aside for conservation. Wetlands and surrounding buffers would be protected by Town regulations, but these regulations allow some level of development by permit. Town regulations regulate, but don't prevent development on slopes in excess of 20%. Slopes in excess of 20%, wetlands, and wetland buffer are indicated on the proposed plan with a dark green color. None of the areas rendered in a lighter green would be protected or otherwise "preserved" by any regulation or mechanism if not set aside as proposed under a

Conservation Easement. A significant amount of these unprotected areas would be permanently preserved under the proposed plan.

### **B.1.b. Layout**

**Comment 2.30 (AKRF):** Review of the site plan, specifically Figure 4 of the DEIS, shows that the existing historic house referenced above would be part of proposed Lot 18 and the existing historic barn would be part of the common HOA lot. It is unclear from the narrative if the existing house on proposed Lot 18 is currently occupied. In addition, if this house would share Lot 18 with an additional house constructed as a result of the proposed project (Figure 16 appears to show it would), how did the existing house factor into the overall density calculation for the proposed project, if at all? In addition, if the house is to be restored in a similar fashion to the barn, the applicant should provide the Planning Board with written concurrence from the SHPO that the proposed restoration is acceptable.

**Response 2.30:** The existing house was occupied until 2018, but is currently vacant. It would be the only house on that lot, and would be counted as one of the allowed number of units. DEIS Figure 16 depicts the yield plan that was developed to determine a lot count, and has no bearing whatsoever on the proposed layout. The Project Sponsor will work with SHPO on the restoration/renovation of the barn, and will provide all necessary documentation to the Planning Board and/or building inspector.

**Comment 2.31 (AKRF):** The Applicant envisions the residential lots to predominately serve as second home investment properties for New York City renters. The Applicant does not envision year-round permanent occupancy. As lead agency the Planning Board is permitted to request analysis of impacts associated with year-round occupancy as part of the FEIS, if determined warranted during the public review of the DEIS. Similar comments were raised by the Planning Board and during the public hearing.

**Response 2.31:** While the units would be marketed as seasonal or second homes, it is recognized that units may be purchased for year-round occupancy, especially by existing residents of Philipstown. Accordingly, year-round occupancy has always been assumed as a worst case scenario in analyzing impacts such as traffic and school populations in the EAF. In the DEIS, and by extension, the FEIS, year round occupancy was also assumed for such issues as water supply and wastewater disposal.

**Comment 2.32 (AKRF):** Why is the area of the project site just north of the Horton Road cul-de-sac and south/east of Ulmar Pond, classified as "Residential Multi Family" on the existing land use map (Figure 14)?

**Response 2.32:** This was an error in trying to abbreviate the type of existing use for the figure's key. The lot in question is tax lot 17-1-76.21 and has a land use code of 280. The full label for the land use should be "Residential Single Family – Multiple Residences", not implying Multi Family structures. Figure 3 (see following page) is a revision of DEIS Figure 14, corrected with the abbreviated label "Residential Multi Residences".

**Comment 2.33 (Gainer):** Lot sizes- Per §175-19B, a variety of lot sizes are recommended so as to represent a "cluster" subdivision layout and so maximize the creation of substantial open space. In §175-20C, it is further suggested that lot sizes as small as those permitted for the Town's "Hamlet" zoning districts be considered (or ½ acre). However, the development proposes a "cookie cutter" layout of lots all generally 1 acre in size, which is not in keeping with the intent of these regulations. This ultimately leads to the opposite effect of committing excessive land to individual lots, and spreading out the development into areas of higher conservation value, which could be avoided with smaller, or at least some variety of lot sizes (i.e.; lots which extend along the west side of Ulmar Pond). It is suggested that various lots around Ulmar Pond either be eliminated or otherwise significantly reduced in size to increase both conserved lands as well as to widen wildlife corridors.

It is recognized that "Alternative D", while having other disadvantages, does represent a different lot arrangement whereby smaller lots are proposed so that additional lands may be protected, specifically in the area of Ulmar Pond. The project design which is ultimately endorsed by the Town should be no less protective of the site's established high and medium conservation value lands.

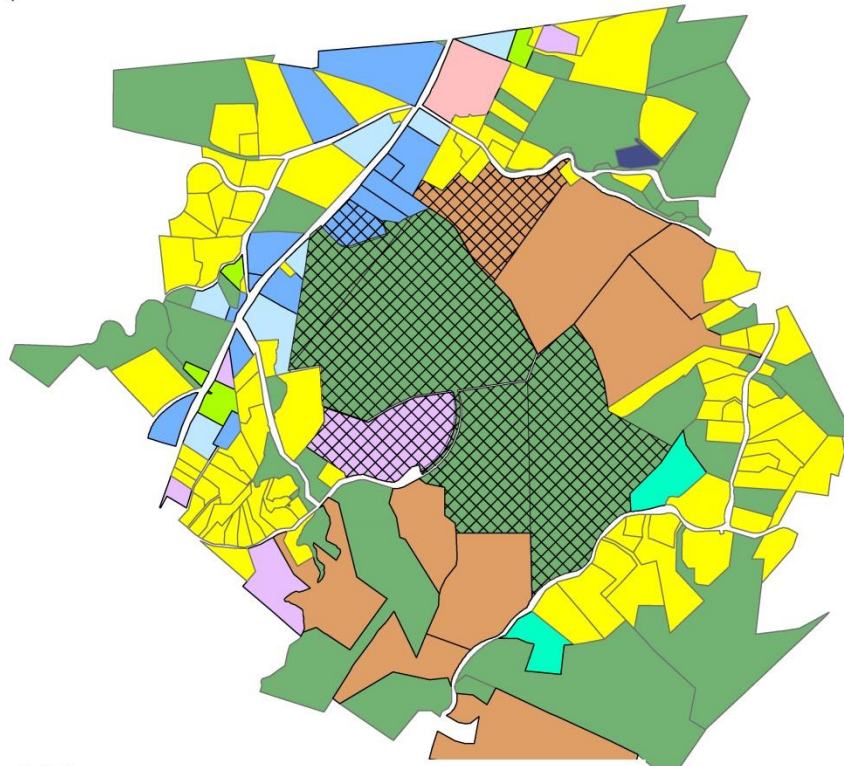
**Response 2.33:** This section of the Code allows a variety of lot sizes, while not mandating consideration of only the smallest of lots, or 'hamlet' size. Specifically, the Code states, "*Conservation subdivisions may include a variety of lot sizes, ranging from large farm or estate lots to small hamlet-size lots.*" The Project Sponsor decided that incorporating "large farm or estate lots" would be contrary to the true purpose of clustering, and would reduce the amount of land that could be set aside from individual land ownership and more easily preserved under a conservation easement. The Project Sponsor also believes that the use of half-acre sized lots in this particular area of the Town will defeat the purpose of "maintaining the rural appearance and environment of the town of Philipstown" as stated in article V (Open Space Development) per §175-19A.1. The proposed one-acre lot size is comparable to the Horton Road/Horton Court/Mill Road neighborhood adjacent to the proposed project. The typical lot size in this neighborhood ranges from around an acre to multiple acres. Likewise, the creation of contiguous houses or townhomes within the development would not be compatible with the character of the rural surroundings.

In the opinion of the Project Sponsor, in endeavoring to remove units from around Ulmar Pond, Alternative D creates other adverse impacts when compared to the proposed project plans: (1) the primary access road in Alternative D is shown as completely obliterating the historic road through the property, eliminating a cultural and recreational resource; (2) the eastern cul-de-sac would push further into land proposed for conservation, greatly increasing the impact upon what is currently an undisturbed block of native forest habitat; (3) the central cul-de-sac extends much further than what is currently proposed, extending the effective adverse impact into adjacent forested habitat; and (4) the smaller lot sizes would also actually allow the units as shown to form a more formidable, less porous barrier to wildlife attempting to cross from one part of the property to the other. The Project Sponsor believes the larger lots proposed in the preferred project plans strike a better balance, clustering units on just 24% of the project site, while, especially with HOA restrictions, minimizing clearing of existing trees and promoting landscaping with native plant species, allowing significant porosity for wildlife movement to continue through developed areas.














# Figure 3: Land Use Map

DEIS Figure 14 (corrected)



## Land Uses

-  HHR SITE
-  Residential Single Family
-  Residential Multiple Single Family Residences
-  Residential Multi Family
-  Residential Rural
-  Residential Seasonal
-  Residential Mobil Home
-  Residential Vacant
-  Commercial
-  Commercial Vacant
-  Water Supply



Land Use source 2018 Town of Philipstown Final Tax Assessment Roll  
map prepared by Badey & Watson, January 2018  
rev March 2021

In the Project Sponsor's preferred plan, the units would be situated from around 171 feet to 277 feet from the edge of the pond. Both stormwater and wastewater would be directed away from the pond as part of the Project Sponsor's design.. The heavy abundance of exotic and invasive species that have taken over areas surrounding the pond would be removed and replaced with native species. The pond itself would be managed, removing decaying and excessive aquatic vegetation, and possibly aerating it as well. Given all of this, the Project Sponsor believes that the condition of Ulmar Pond will be improved in the post-development condition than as it exists today.

### **B.1.c. Homeowners Association**

**Comment 2.34 (Conner):** Will the HOA be managed by owners or by a management company? Will there be any restriction on whether or not a management company can be engaged?

**Response 2.34:** Initially the site will be managed by the development company. Upon 80% occupancy of the individual parcels, management will be transferred to the HOA. The HOA will be managed by the homeowners. Each homeowner [member] is a voting member of the association, and a representative of the holder of the Conservation Easement and Project Sponsor will be non-voting members. The HOA will have a governing Board of Directors. The Board of Directors will consist of four (4) directors [members] and one representative from the holder of the Conservation Easement and Project Sponsor. The Board of Directors may hire a management company if they so choose pursuant to Article VIII, Section 6(a)(10) of the Bylaws.

The option to use a management company for regular maintenance and upkeep is up to the discretion and approval of the HOA.

**Comment 2.35 (Conner):** Can the HOA board of directors change the rules/restrictions for the development related to the equestrian center? What changes would the HOA board of directors be permitted to make to the HOA in general?

**Response 2.35:** The Equestrian Center has been removed as an element of the proposed project.

The HOA Board of Directors can change the rules/restrictions for the development as provided for in Section 5 of the General Rules and Regulations:

Section 5. Right to Change General Rules and Regulations.

- (a) Any consent or approval given under these General Rules or the Residential Design and Maintenance Rules and Regulations and Regulations may be amended, modified, added to, or repealed at any time by resolution of the Board of Directors of the Association, except as may be provided elsewhere herein. Further, any such consent or approval may, in the discretion of the Board of

Directors of the Association or the Managing Agent, if any, be conditional in nature.

- (b) Further, the Board of Directors reserves the right to rescind, alter, waive or add, as to one or more or all Residential Lot Owners, occupants, lessees, guests and any other person residing in a Home located thereon, any General Rule or Regulation or any Residential Design and Maintenance Rules and Regulations at any time prescribed for the Association, when, in the reasonable judgment of the Board of Directors of the Association, the Board of Directors of the Association deems it necessary or desirable for the reputation, safety, character, security, care, appearance or interests of the Association, or the preservation of good order therein, or for the operation or maintenance of the Association or the equipment thereof, or the comfort of Residential Lot Owners, occupants or others in the Association. No rescission, alteration, waiver or addition of any rule or regulation in respect of one Residential Lot Owner or other occupant will operate as a rescission, alteration or waiver in respect of any other Residential Lot Owner or other occupant.
- (c) The Board shall have the right to either increase or decrease the amount of the fines imposed on the Residential Lot Owners on an individual basis or as it applies to all Residential Lot Owners. If the Board of Directors of the Association changes the amount of the fines as it applies to all Residential Lot Owners it shall do so only after a notice has been sent to the Residential Lot Owners advising them of the change.

Furthermore, any material change to the bylaws by the Board of Directors requires from first mortgage approval of at least fifty-one (51%) percent of the votes of the mortgage holders.

**Comment 2.36 (Conservation Board):** Paying any subdivision's monthly maintenance charges is similar to paying taxes: every taxpayer/homeowner wants the benefits that come from spending either tax dollars or HOA maintenance charges, but those same taxpayers/homeowners are often unwilling to vote for the level of taxes/monthly charges required to fund such benefits, and will try to avoid payment of taxes/monthly charges unless there is a significant and immediate benefit to doing so, as well as a significant and immediate sanction for failure to do so. The members of the board of directors of the HOA will be asked every year to determine the annual maintenance charges to be assessed against all residents of HHR, including themselves. There could not be a more clear-cut conflict of interest.

**Response 2.36:** The HOA would be guided by Not-for-Profit Corporation Law, in which individual Board members have a fiduciary duty to abide by all laws as well as the governing documents of the HOA. Pursuant to the foregoing requirements, it is the Project sponsor's opinion that each Board member must act in the best interests of the HOA and its members.



**Comment 2.37 (Conservation Board):** As with the conflict inherent in setting and collecting maintenance charges, there will be a similar conflict with respect to use of the Conserved Land. Residents will have an understandable desire to use the Conserved Land, all of which will be private; reserved exclusively for their use; and supported by the maintenance charges that they pay. At the same time, however, the HOA board members will have a duty to conserve and protect such lands against all but minimal human use, not to mention protection against any incursion by horses. Such conflict between the natural inclination of residents and the duties of the HOA board has the potential to become irreconcilable.

**Response 2.37:** As noted in Response 2.36, the members of the Board of the HOA have fiduciary duties and obligations, one of which will be to ensure that the Conservation Area is utilized and maintained in accordance with the Conservation Easement that will run the land. Moreover, the Conservation Easement holder will oversee and ensure that the Conservation Easement is complied with. In addition, the Conservation Easement may be enforced by the Conservation Easement holder as well as the Town and the HOA Board. Thus there is more than one level of protection in place to ensure that the Conservation Easement is complied with in perpetuity.

The Equestrian Center has been removed as an element of the proposed project, so potential incursion by horses is no longer an issue.

**Comment 2.38 (Conservation Board):** Public Board Members. In order to address the structural conflict of interest inherent within the proposed HOA, the HOA should have a five-person board of directors, consisting of three members elected by residents of HHR and two public members, collectively nominated by Open Spaces Institute; Riverkeeper; Hudson Highlands Land Trust; Constitution Marsh Audubon Center and Sanctuary; Scenic Hudson; and the Philipstown Garden Club. If not all of the six entities listed in the prior sentence wish to participate in the nomination process, the remaining entities should do so. The two public members should be approved and appointed by the Town of Philipstown. Such public members shall be full voting members of the HOA, fully indemnified as are the other board members, and should be authorized to report to the holder of the Conservation Easement, the Town of Philipstown, and the CB any issues or concerns they may wish to raise with respect to HHR. The bylaws of the HOA should be modified to require that at least one public member be present at any meeting of the board in order for it to have a quorum and take any action.

An HOA does not typically have or need public members, and if this were a conventional subdivision, without an Equestrian Center, there would be no need for public members. The potential for environmental damage to Water Resources, Vegetation, and Wildlife is so great, however, and the public interest is so strongly implicated, that public members of this HOA board are critical. Public corporations in the United States routinely have independent board members, with no conflicts of interest, and so should the HOA for HHR.

**Response 2.38:** This development is a private residential community. It is not Town-owned or operated. Public individuals who are not members of the HOA have no standing to serve on the Board of the HOA. As noted above, the HOA will be formed pursuant to the Not-for-Profit Corporation Law, and the community is subject to the HOA governing documents as well as all Town and other applicable laws, the same as any other residence situated within the Town. In

addition, the Conservation Easement is subject to enforcement by the Conservation Easement holder as well as the Town and the Board of the HOA.

Further, the commenter states, *"if this were a conventional subdivision, without an Equestrian Center, there would be no need for public members."* As the Equestrian Center has been removed as an element of the proposed project, it would appear that this comment has been rendered moot.

**Comment 2.39 (Conservation Board):** Appendix J to the DEIS contains, among other documents, the General Rules and Regulations of Hudson Highland Reserve Homeowners Association (the "General Rules"). Section 1 of the General Rules contain 35 separate rules applicable to homeowners, covering issues such as the parking of cars; license plates; dogs; cats; signs; fences; gates; maintenance charges; nuisances; and a variety of other issues.

The single most important rule of the 35 rules specified is Rule (ii), which is the 35th, last, and least conspicuous of all of the rules. It states as follows: "No horses or horseback riding shall be permitted anywhere in the Community except within the Equestrian Center." While the rule is clear and in keeping with representations of the developer, the importance of it to environmental protection is such that it should have been the first of all of the rules, rather than the last. Placing this critical rule last in a long list of rules, most of which are trivial in comparison, is inappropriate. Accordingly, Rule (ii) should become the first Rule (i.e., Rule (a)), and, in order to emphasize its importance and avoid any contention by any party that they were unaware of the rule, it should be printed in capital letters, in bold-face type.

**Response 2.39:** The Equestrian Center has been removed as an element of the proposed project.

**Comment 2.40 (Conservation Board):** In addition, Section 6 (16) of the Bylaws of the HOA allows the board of directors of the HOA to "amend, modify or repeal" any of the General Rules. Accordingly, current Rule (ii), which should become Rule (a), should include the following sentence: "This rule (a) may not be amended, modified, or repealed without written consent of the holder of the Conservation Easement and the Town of Philipstown." Likewise, Section 6 (16) of the bylaws of the HOA, which explicitly authorizes amendment, modification, or repeal of any rules, should add a statement prohibiting any amendment, modification, or repeal of current Rule (ii), without the written consent of the holder of the Conservation Easement and of the Town of Philipstown.

**Response 2.40:** The commenter is suggesting that the rule prohibiting horses or horseback riding anywhere in the community (there is no more Equestrian Center) should be further restricted by a rule that same may not be amended, modified or repealed without the written consent of either the Conservation Easement holder or the Town. The Project Sponsor intends to incorporate this suggestion into the bylaws.

**Comment 2.41 (Conservation Board):** Appendix "I" to the DEIS is the Declaration of Covenants, Restrictions, Easements, Charges and Liens (the "Declaration"), which addresses the issues suggested by its title. Contrary to the intent stated elsewhere to prohibit riding horses anywhere in HHR other than within the Equestrian Center, Article V, Section 2 (iii) of the Declaration explicitly grants an easement approving horse riding outside of the Equestrian Center: "Right-of-way for ingress and egress and/or use and enjoyment by horseback riders

who are instructors, students, patrons or invitees of the Equestrian Center, over and on the interior roadways in the Community and over and on the Historic Roadway."

That provision explicitly approves the use of horses outside of the Equestrian Center, rather than prohibiting such usage, and it significantly undermines the credibility of the developer's assurances to the contrary. Once horses are permitted to be ridden "over and on the interior roadways in the Community and over and on the Historic Roadway," it is inevitable that they will begin to be ridden everywhere throughout the Conserved Land. The Declaration must be revised to remove the proposed easement allowing horses to be ridden outside of the Equestrian Center, in conformity to the terms of the Conservation Easement. The Declaration's grant of an easement allowing horseback riding should be replaced by a prohibition, and the prohibition should be printed in capital letters and in bold-face type.

**Response 2.41:** Inasmuch as horseback riding in the community is to be prohibited, any reference in the HOA governing documents to an easement which would have permitted horses to be ridden in the community will be removed.

**Comment 2.42 (Hammond):** Lawns are mini environmental disaster. Planning Board asked for limits on clearing/lawn areas, but I see no attempt to limit lawns. Insistence on 25 one acre lots, as opposed to truly clustered housing, is not coherent with a conservation development.

**Response 2.42:** Each of the lots will be subjected to comprehensive development rules on both the structures and the lots, including landscaped areas. The current HOA Residential Design and Maintenance Rules and Regulations restrict the total lawn area to 2,000 square feet per one-acre lot. Additional landscaping guidelines are outlined on pages 31 and 32 of the documents.

**Comment 2.43 (Hammond):** Developer claims that use of pesticides and fertilizers as well as equestrian use of conserved land would be regulated by HOA, but who will enforce the HOA regulations? It is well known that many homeowners in drought-stricken environments regularly ignore lawn watering bans and that people do whatever they want in their own yards. If each household has a lawn, it seems likely that it will be irrigated, fertilized and have pesticides applied. Who will control that?

**Response 2.43:** The Conservation Easement provides that no pesticides or chemicals may be applied unless the Conservation Easement holder expressly consents to same prior to any such use, and same must be utilized in conformance with the manufacturer's and legal guidelines. In terms of irrigation, the Town's requirements, if any, must be followed by the homeowners in this development, just as residents of the Town must so abide. The Town can enforce its own laws, and the Board is empowered to enforce the HOA By-Laws, and Rules and Regulations as well.

## B.2. Conservation Area

**Comment 2.44 (Butensky):** The final determination as to which land has the most conservation value and should be protected from development by conservation easement shall be made by the planning board. It's not made by the developer. It's made by the planning board. That's in the law.

**Response 2.44:** The Town Code of the Town of Philipstown does require these decisions to be made by the Planning Board. Accordingly, the map depicting the areas of "high" and "medium" conservation value was officially adopted by resolution of the Planning Board on November 17, 2016. The Planning Board will similarly adopt the boundaries of the Conservation Area as part of the project approval.

**Comment 2.45 (AKRF):** The DEIS indicates that the proposed 170.8 acres of Conservation Area includes the Equestrian Center, the SSTS and Reserve SSTS areas. Such areas are essentially "developed" and not appropriate to include in the Conservation Area. Per Town Code § 175-21.A.3.a/b, uses allowed in conservation easement must "protect the conservation values identified in the conservation analysis." Conversion of forested land, with its well-documented conservation values, to an indoor/outdoor riding rings, horse boarding stalls, roadways and parking, and sub-surface septic treatment systems does not further the conservation value of the land. Note also Town Code §175-20.H.2: "Such open space may be owned by a homeowner's association...as long as it is protected from development by a conservation easement and does not result in fragmentation of the open space land in a manner that compromises its conservation value." The Equestrian Center and SSTS, and their related developed areas, do not appear compliant with this section of the Town Code.

**Response 2.45:** The Equestrian Center has been removed as an element of the proposed project, so it is no longer an issue. The area to be subject to the Conservation Easement has been adjusted to exclude the subsurface sanitary treatment system (SSTS) and the stormwater management practices, and was accordingly initially reduced to 159.5 acres. Since then, other changes to the proposed plan has resulted in the Conservation Area being increased to 163 acres. The Reserve SSTS will remain within the Conservation Area. As specifically provided in Town Code §175-21.A.3.b, which addresses the preservation of open space by conservation easement, "Access roads, driveways, local utility distribution lines, **subsurface wastewater disposal systems**, trails, temporary structures for outdoor recreation and agricultural structures shall be permitted on preserved open space land, provided that they do not impair the conservation value of the land." It is unlikely that the Reserve SSTS will ever be developed, but if so, it can be revegetated with native species.

**Comment 2.46 (AKRF):** Appendix K: Conservation Easement: Section 4.3(d) Pedestrian Trails, Utilities and Drainage Ways. This section is not restrictively defined so potential impacts to undeveloped lands are unknown. Also, Section 4.6 Clearing of Trees and Vegetation, is similarly poorly defined for conservation lands which are to remain undisturbed. By contrast, Section, 4.2 Equestrian Center, is clearly defined and appropriate: "Horses and horseback riding shall be permitted only in the 11.1 acres of the Equestrian Center, in all other areas horses of the Property and the Conservation Subdivision horseback riding shall be prohibited."

**Response 2.46:** The Conservation Easement clearly defines the Conservation Area and the restrictions that apply thereto. Moreover, the Town is the author of this document, and has set forth restrictions on pedestrian trails, utilities, drainage ways, and clearing of trees and vegetation. No trails or utilities are proposed within the Conservation Area. The Equestrian Center is no longer contemplated for this project.

**Comment 2.47 (Conner):** What is the total percentage of the lands to be placed under the conservation easement that consist of Class III Slopes, i.e., slopes equal to or over 35%?

What is the total percentage of the lands to be placed under the conservation easement that consist of Class II Slopes, i.e., slopes equal to or over 25%?

What is the total percentage of the lands to be placed under the conservation easement that consist of Class I Slopes, i.e., slopes equal to or over 15%?

**Response 2.47:** The Philipstown Town Code no longer categorizes steep slopes in three classes. It now uses just two ranges; slopes between 20 and 35% and those over 35%. Table 9 shows the area of land with steep slopes in each of the two ranges, as well as the areas where the slopes are less than 20% and thus, not considered steep by the Town Code. Each range is further divided into those within and not within in the Conservation Area.

Slope Range	Area within Conservation Area		Area not within Conservation Area	Total Area within Range
	Acres	Percent of total	Acres	Acres
0-20	64.90	68.7%	29.53	94.43
20-35	56.41	88.4%	7.43	63.84
35+	49.42	95.3%	2.43	51.85
Total	170.73	81.3%	39.39	210.12

**Comment 2.48 (Conner):** What is the total percentage of the lands to be placed under the conservation easement that consist of steep terrain that is located within 50 feet of a watercourse, controlled wetland as defined in Chapter 93 or lands that are regulated by the State of New York pursuant to the Freshwater Wetlands Act (Article 24 of the New York Environmental Conservation Law)?

**Response 2.48:** The Conservation Area contains 163 acres. The total area of steep terrain that is located within 50 feet of a watercourse, controlled wetland as defined in Chapter 93 or within lands that are regulated by the State of New York pursuant to the Freshwater Wetlands Act (Article 24 of the New York Environmental Conservation Law) is 7.96 acres, all of which is within the Conservation Easement. The total percentage is therefore 4.9% ( $7.96 / 163 = 0.0488$ ).

**Comment 2.49 (Conservation Board):** Certified Land Trust. In view of the critical importance of proper administration and enforcement of the Conservation Easement, only a land trust certified by the Land Trust Alliance Accreditation Commission should be accepted by the Town of Philipstown as the holder of the Conservation Easement. As indicated on its website, "The Land Trust Accreditation Commission was incorporated in April 2006 as an independent program of the Land Trust Alliance to operate an innovative program to build and recognize strong land trusts, foster public confidence in land conservation and help ensure the long-term protection of land." It is the gold standard for land trust accreditation, and the citizens of Philipstown are entitled to nothing less. If a land trust accredited by the Land Trust Accreditation Commission willing to hold the Conservation Easement cannot be found, that will be a red flag for the Town of Philipstown that something is seriously wrong with the proposed development.

**Response 2.49:** The Town Code places no such limitation on the chosen holder of the Conservation Easement. Specifically, the Code requires that the Conservation Easement "*shall be granted to the Town, with the approval of the Town Board, or to a qualified not-for-profit conservation organization or other governmental body acceptable to the Planning Board.*" Accordingly, it is entirely possible that the Town itself, or another governmental body, will be the holder of the easement. Should a not-for-profit be considered, the substance of this comment will be considered when evaluating potential easement holders. The Project Sponsor, in consultation with the Planning Board, will select an organization with the authority to accept lands, easements and buildings for the purpose of preserving and protecting natural, scenic, forested, and open-space values of real property, and with the commitment to preserve the conservation purposes of the Property.

**Comment 2.50 (Conservation Board):** "Trust but Verify": Testing & Inspection for...Vegetation & Wildlife: an independent, certified wildlife and habitat management firm selected by the Town of Philipstown should inspect the Conserved Land monthly to determine the degree to which vegetation and wildlife and their habitats are being disturbed, either by construction; human activity; horses being brought onto the Conserved Land; or any other activities. Such inspections and reports should be under the same terms and schedule proposed above for water testing.

**Response 2.50:** As the Equestrian Center has been removed as an element of the proposed project, nothing else is proposed on the Conserved Land other than the reserve sanitary disposal field, which is unlikely to ever be needed. Likewise, no horses could be brought onto the Conserved Land. There would therefore be no need for monthly inspections. Future inspections of the Conserved Land can be conducted by both the Homeowners Association and the holder of the Conservation Easement.

**Comment 2.51 (Conservation Board):** Baseline Testing: in order to provide baseline data,...a full field inspection of the Conserved Lands should be undertaken within 30 days of any approval of HHR by the Planning Board and should be done monthly thereafter, in order to provide a meaningful pre-development record of...the presence or absence of wildlife. Absent such baselines, it will not be possible to fully evaluate the implications of later testing and inspection.

**Response 2.51:** This is an issue that is best addressed by the eventual holder of the Conservation Easement, which will be determined prior to construction.

**Comment 2.52 (Conservation Board):** Section 6.2 of the Conservation Easement says that the Grantee may bring an action for injunctive relief, but does not say against whom such action may be brought. This section should state clearly that any such action may be brought against the Grantor at any time until it no longer owns any lots for sale within HHR and, thereafter, against the HOA.

Section 6.3 of the Conservation Easement says that the Grantee may recover damages for violation of the terms of the Conservation Easement or injury to any of the conservation purposes that are protected by its terms but does not say against whom such damages may be recovered. This section should state clearly that damages may be recovered against the developer at any time until it no longer owns any lots for sale within HHR and, thereafter, against the HOA.

**Response 2.52:** Any enforcement action(s) that could be brought by the Conservation Easement holder should be brought against the HOA, as it is the HOA, by way of its Board of Directors, which is responsible for compliance with the Conservation Easement. Any such enforcement actions should not be singularly brought against the Grantor simply because it may retain ownership of one or more lots within the development. Similarly, any alleged damages for violation of the terms of the Conservation Easement should be sought against the Association and not the Grantor, as it is primarily responsible for compliance with the Conservation Easement.

**Comment 2.53 (Conservation Board):** Section 6.6 of the Conservation Easement deals with costs of enforcement, including both attorney's fees and any costs of restoration of the Conserved Land. It states that any of such fees and costs shall be borne by the Grantor, if the Grantee prevails in a judicial action. The Grantor, however, is an LLC, which means "Limited Liability Company." One of the purposes of an LLC is to protect the beneficial owners of the LLC from any personal liability. This means that, if the Grantee and/or the Town of Philipstown (pursuant to its third party enforcement rights under Section 6.8 of the Conservation Easement) obtain a judgment against the Grantor for violations of the Conservation Easement, the Grantor may or may not have the funds with which to pay such judgment.

In addition, Section 10.2 of the Conservation Easement explicitly disclaims personal liability for any beneficial owner, confirming that the Easement was drafted with the specific purpose and intent of limiting the ability of the Grantee and the Town of Philipstown to assert any claims against the beneficial owners, even if the Grantor is unable to pay a judgment or respond to other orders of a court. It is not acceptable for the beneficial owners to reap the profits from development of HHR and have the ability to walk away from its liabilities.

Accordingly, the beneficial owner or owners of Horton Road LLC should provide an unconditional guarantee to the Grantee and to the Town of Philipstown, covering any and all obligations of the Grantor under the Conservation Easement, including but not limited to fees, costs, expenses and damages, in the event Horton Road LLC does not pay any sums awarded pursuant to a final, non-appealable judgment against it, in whole or in part, or fails to take any action required of it under any section or provision of the Conservation Easement. Promises by any LLC, including Horton Road LLC, are illusory without either such a personal guaranty, a letter of credit, or another, functionally similar, alternative.

**Response 2.53:** Matters concerning the Conservation Easement are within the purview of the Town. The Conservation Easement grants the Town a Third-Party enforcement right. Moreover, the Conservation Easement provides that the HOA is responsible for all costs of enforcement against the HOA or its members (unless it is found that the HOA is not liable).

**Comment 2.54 (HHLT):** Section 175-21A (3)(b) of the zoning code states *“The configuration of the open space land and dwellings shall not result in fragmentation of the open space land in a manner that interferes with its proper management and protection of its conservation values.”* We have already commented that the configuration of the open space cuts off one important wildlife corridor (between Clove Creek and Ulmar Pond) and constricts another (between the eastern slopes and Ulmar Pond). In addition, because of the houses wrapped around the pond and the easement land going in between the rows of houses on either side of the old road, all houses face the conservation easement, without natural or manmade barriers (such as a road). This means that an easement holder must face potential violations and encroachments from 25 different homeowners, as well as users of the equestrian facility. This layout makes easement monitoring and enforcement excessively cumbersome and adversely interferes with proper management of the conservation values.

**Response 2.54:** The impact of the proposed plan on wildlife corridors is addressed elsewhere in this FEIS. The preservation of the historic road benefits both the preservation of a cultural resource, as well as providing an additional north-south corridor for wildlife beyond what is provided by preserving land to the east. The concept of having every house border on to a preserved interconnected open space is a basic design tenet of clustered subdivisions that goes back nearly 100 years, as typified by the oft-studied model of Radburn, NJ, in 1929. The Project Sponsor believes that the presence of the historic road will enable easy inspection of potential violations and encroachments. In the area of Ulmar Pond, the back boundary of the individual lots bordering on the land subject to a Conservation Easement will be demarcated by a reproduction of a stone farmer’s wall, similar to what is found elsewhere on the property. This will allow easy identification of any violation or encroachment, even as small as the dumping of leaves beyond the stone boundary on the conserved land.

**Comment 2.55 (HHLT):** Requirements for Conserved Open Space are not Met: Section 175-21A(1) of the Zoning Code states: *“The open space protected must include all the land determined pursuant to §175-20A(4) to have the most conservation value and, subject to § 175-20H, as much other land having conservation value as possible (as established by the conservation analysis and conservation findings)”*. This requirement is not met because almost all of the “potential developable land” (DEIS Figure 15) is developed, and yet much of that land is important for wildlife as noted in the Coleman 2014 letter, and as preferred habitat for NYS Species of Special Concern that use the site, as discussed in Dr. Klemens letter in Exhibit B. Furthermore, if the deficiencies in the applicant’s wildlife studies around vernal pools, amphibians and reptiles are corrected, it is likely this habitat will be found in this “potential developable area” also.

**Response 2.55:** There is no prohibition in the Code against using the entirety of the land determined to not have the most conservation value. The entire paragraph that contains the referenced quote reads:



*“Conservation value of open space. The open space protected must include all the land determined pursuant to § [175-20A\(4\)](#) to have the most conservation value and, subject to § [175-20H](#), as much other land having conservation value as possible (as established by the conservation analysis and conservation findings). Examples of lands with conservation value include view corridors along scenic roads, agricultural land, ridgelines, steep slopes, designated critical environmental areas, large areas of contiguous mature forest, wetlands, watercourses, and stream corridors. Prime and statewide important agricultural land, even if suitable for development, shall be considered land of conservation value.”*

All of the areas within the project site meeting the criteria listed are being preserved with the exception of unavoidable steep slope disturbance required for the entrance road. The proposed community center and Lot 20 are shown within an area of high conservation value solely because of the identified historic structures, both of which are being preserved and adaptively reused.

The revised project plans have now also moved some development from areas of “low conservation value” in the center of the property, so now areas within all three conservation value areas are included within the proposed Conservation Area. Figure 4, provided on the following page, is a revision of DEIS Figure 15 showing the new project plans.

**Comment 2.58 (Merante):** While most conservation easements allow agricultural uses,

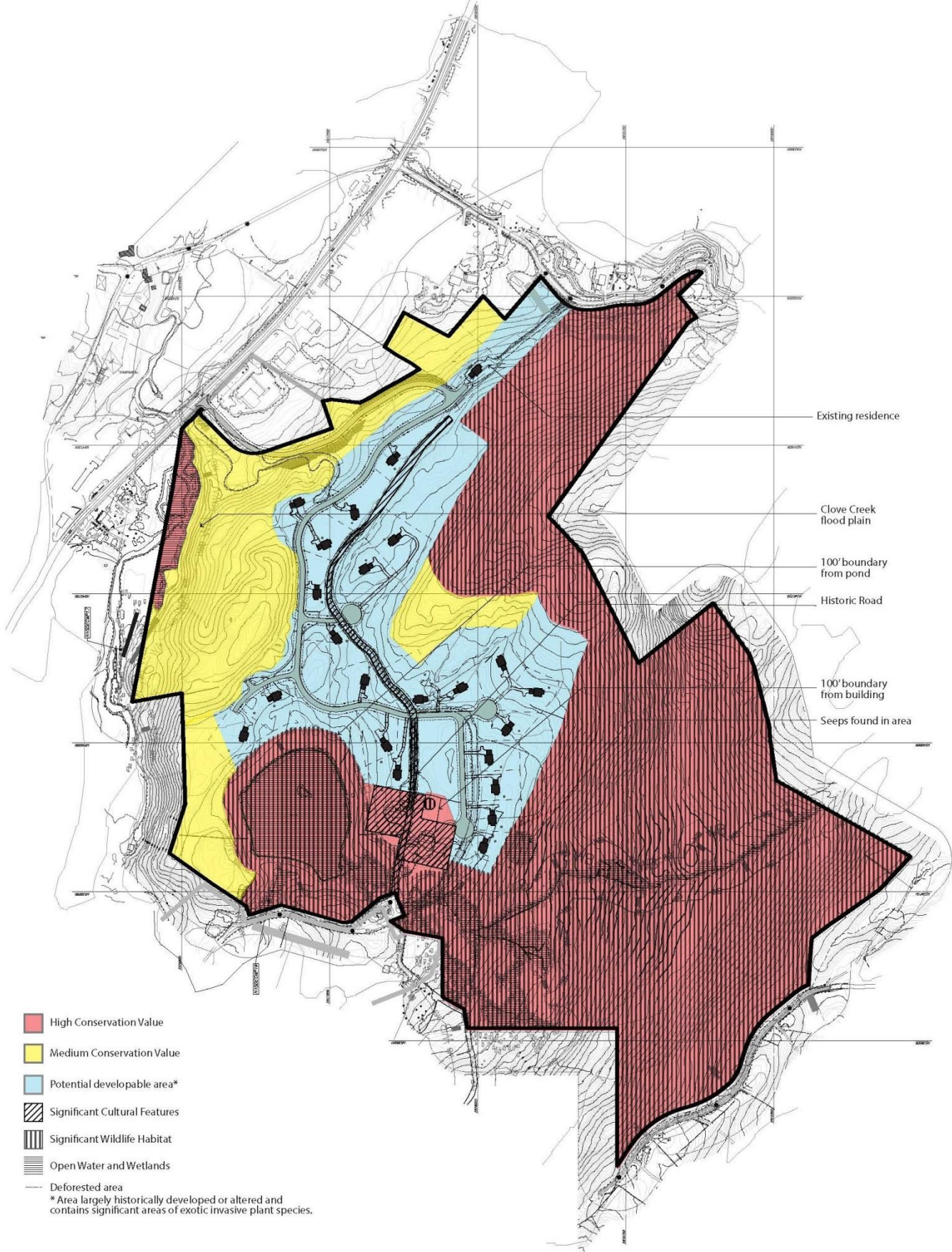
- is this not an 'industrial form of agriculture?
- is this structure allowed on preserved open space - it is a fully-developed area consisting mainly of impervious surfaces.

Is this not anathema to the spirit of a conservation subdivision and conservation easement?

**Response 2.58:** The Equestrian Center has been removed as an element of the proposed project.

**Comment 2.59 (Conservation Board):** With respect to human usage, the Conserved Land will be closed to use by the public and will be available only for use by the homeowners in HHR. That restriction will limit the number of individuals who will be using the land, but it is not clear what uses the residents of HHR will make of the land; how such uses will be regulated; and how aggressively the HOA will enforce protective rules for the Conserved Land. Absent strict guidelines that are actually enforced, use of the Conserved Lands by HHR residents will be likely to degrade them both as a habitat for wildlife and as an "undeveloped contiguous forest." It is a certainty that the proximity of 160 acres of undeveloped land to the 25 homes that will be built will introduce a permanent population, at least some of the members of which will desire to engage in outdoor recreational activities near where they live, i.e., in the Conserved Land.

**Response 2.59:** Article VII Section 2 of the HHR By-Laws and Protective Covenants outlines a lump sum contribution by the developer to the HOA for the maintenance of passive recreation within the Open Space. Article XII Section 2 states that all open space management shall occur in conjunction with the holder of the Conservation Easement and the NYS Dept. of Environmental Conservation.



**Figure 4: Conservation Values (Showing Current Layout)**

Uses in the Conserved Land area will be restricted as set forth in the Conservation Easement. The Conserved Land area shall be used solely for passive and recreational uses. The term “passive recreational use” is defined as “*outdoor activities compatible with preserving natural resources, including but not limited to walking, hiking, picnicking, cross-country skiing, snowshoeing, sunbathing, fishing and bird watching. Said term shall not include any obtrusive outdoor activities that may have adverse impacts on natural or open space values including the operation of motorized vehicles or equipment, except for motor vehicles and equipment used for the routine maintenance or upkeep of the Property or for emergency purposes. The HOA will be responsible for enforcing these restrictions. The Town and the Conservation Easement holder will also have enforcement powers.*”

**Comment 2.60 (Conservation Board):** Horses pose a danger at least as great to the Conserved Land as do humans, both because of the habitat destruction that would be caused by riding and also because of horse waste that would be left in the Conserved Land anytime that horses intrude there. The DEIS implicitly recognizes this fact by stating that riding horses anywhere within HHR other than at the Equestrian Center will be prohibited. The DEIS and its accompanying appendices contain totally inconsistent and contradictory statements, however, with respect to the issue of riding horses outside of the Equestrian Center.

Those internal contradictions make all the more important the question of who will monitor and enforce the seeming prohibition against riding horses outside of the Equestrian Center. Some or all of the members of the board of directors of the HOA will be horse owners themselves, and Philipstown is being asked to rely on them to insure that horses do not destroy the wildlife, vegetation, and habitat within the Conserved Land. Whether the HOA does so or not will determine the fate of the Conserved Land.

**Response 2.60:** The Equestrian Center has been removed as an element of the proposed project.

**Comment 2.61 (Conservation Board):** It defies both experience and human nature to believe that residents will not wish to make full use of the Conserved Land for recreational purposes. There are no public parks or recreation areas within walking distance of HHR; while Philipstown has many such areas, residents of HHR will have to drive in order to reach any of them. The 160 acres of Conserved Land, however, will be within immediate walking distance to every house located within HHR. Indeed, access to such lands will presumably be a major selling point by the developer, so the argument that the residents either will not wish to use such lands or will do so only sparingly seems improbable. People who purchase luxury houses anywhere within the Hudson Highlands expect, depending upon their particular interests, to be able to walk; bike; jog; run; ride horses; hunt; sunbathe; engage in outdoor photography; cookout; barbeque; play ball and other sports; fish; and engage in all normal outdoor recreational pursuits. The temptation to do so in the Conserved Land will be overwhelming, notwithstanding rules purporting to limit such use.

**Response 2.61:** As discussed above, residents may use the Conserved Land for passive recreational uses. The HOA will be responsible for making sure residents follow the restrictions established in the Conservation Easement. Uses on the Conserved Land will be further enforced by the third-party Conservation Easement holder and the Town.

**Comment 2.62 (Conservation Board):** Approximately 160 acres of undeveloped Conserved Land will be included within the Conservation Easement. The DEIS identifies an extensive list of flora and fauna that can be found at the current time within the Conserved Land, and presents an optimistic view of the beneficial impact that the Conservation Easement will have upon all of such vegetation and wildlife. At the same time, the DEIS notes the risk posed to the Conserved Land by human usage:

*"The introduction of human activity can have a detrimental effect on wildlife. It can displace plants and animals from their natural environment. At its worst, it can cause the extirpation of flora and fauna that are necessary to the environment. In order to preserve the environment, destruction of wildlife, especially threatened or endangered species, should be avoided."* (DEIS, p. 75)

How destructive the impact of human usage of the Conserved Land will be is unknowable at the present time. The two primary variables that will determine how destructive human usage will be are those of (i) the frequency and intensity of actual human use of the Conserved Land by residents of HRR, irrespective of subdivision rules; and (ii) domesticated animal (primarily horses) use of the Conserved Land, irrespective of subdivision rules.

**Response 2.62:** The DEIS language cited is part of an introductory statement on how development, if not mitigated to the maximum extent practicable, can have negative effects on vegetation and wildlife. The DEIS text that follows it was the Project Sponsor's explanation of what is being proposed as part of the project to avoid those potential impacts.

In part, this includes the following:

*"The applicant has addressed the possibility that its project will threaten wildlife habitat in several ways. First, it has proposed a cluster subdivision that will leave approximately 74% of the site untouched and permanently preserved. The design proposes to develop the area of the site that was previously subjected to human activity. This is the same area where much of the native plant population has been replaced by invasive species. Moreover, those areas of the site where native species thrive have been avoided..."*

*A concern that the Hudson Highlands Reserve project would fragment the forest that exists on the property was raised early in the approval process...Its design proposes development of the forest fringe area, the land closest to Route 9, East Mountain Road North and Horton Road, where most of the existing development is located. It acquired additional land, land further from Route 9, East Mountain Road North and Horton Road. The additional area, although adjacent to East Mountain Road South, is nearer the unfragmented forest contained within Fahnestock State Park, permanently preserving more buffer for the unfragmented forest.*

*If the project is approved, this additional land will be permanently preserved, thus minimizing forest fragmentation. The Planning Board has reviewed the plans and supporting documents provided by the applicant as they relate to wildlife. It has considered the mitigations offered by the applicant and comments from others leading to the requirement that this environmental impact statement be prepared. As detailed in the following pages, the findings in this environmental impact statement conclude that the applicant's plans and designs address these concerns to the greatest practical extent."*

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As the Equestrian Center has been removed as an element of the proposed project, use of the Conserved Area by horses is no longer a concern.

**Comment 2.63 (Conservation Board):** Section 4.1 of the Conservation Easement is entitled "Use of Property." It is intended to describe what uses may be made of the approximately 160 acres of Conserved Land, not including the Equestrian Center. It lists eight permitted uses as being "included but not limited to." The section should provide that those eight activities are the only permitted uses, and that future permitted uses may be added upon request of the Grantor or the HOA, subject to written agreement by the Grantee and the Town of Philipstown. Such request for approval should provide the Grantee and the Town of Philipstown 90 days within which to respond. In addition, although it is garbled, the last sentence of Section 4.2 of the Conservation Easement states that horseback riding shall not be permitted outside of the Equestrian Center; that prohibition, clearly written, should be added to Section 4.1 of the Conservation Easement as well.

**Response 2.63:** The permitted uses in the Conservation Area are set forth in the Conservation Easement. Further, Town Code permits only certain uses in the Open Space Conservation District/Scenic Protection Overlay District. Moreover, the prohibition against horseback riding, as noted above, shall be included in the HOA documents. Equestrian activities are no longer proposed as part of this project.

**Comment 2.64 (Conservation Board):** The equestrian center as designed is not the form of an agricultural enterprise that is consistent with a conservation easement. The CB has significant concerns in regard to this proposed commercial operation on 11 acres. The equestrian center will comprise large areas of indoor space, with impermeable surfaces and very high livestock density. Animal, human, and vehicular traffic from both regular use and special events are of concern, as is the effective management of waste and introduced vermin. As geographically situated, the equestrian center represents a significant man-made barrier to wildlife migration and intensifies the aforementioned edge effect. An equestrian center of this size in operation 24/7, 365 days a year is not consistent with the intent of limited agricultural use provision for a conservation easement. The CB recommends a significant downsizing of the equestrian center, relocation further west/north to increase the width of the wildlife corridor, and its exclusion from the calculation of conserved lands.

**Response 2.64:** The Equestrian Center has been removed as an element of the proposed project.

**Comment 2.65 (HHLT):** The equestrian facility 11 acres should not be included in the conserved open space because it is inconsistent with 175-21 A(3)(b) of the code. Section 175-21 A(3)(b) says "agricultural structures shall be permitted on preserved open space land, provided that they do not impair the conservation value of the land". The equestrian facility appears to be a fully developed area and consists mainly of impervious (or close to impervious) surface. Even the turnout paddocks and outdoor arena will be developed with near impervious surface, impairing the conservation value. The remainder of the equestrian facility consists of buildings and horse trailer parking that clearly impair conservation values.

**Response 2.65:** The Equestrian Center has been removed as an element of the proposed project.

**Comment 2.66 (HHLT):** Remove the historic road from inclusion in the conserved open space to simplify conservation easement management.

**Response 2.66:** The intent of including the historic road in the Conserved Area is to preserve an important cultural resource. It also provides an additional north-south corridor for wildlife movement, and a space for passive recreational activity in the form of walking. The Project Sponsor sees the inclusion of the road as a benefit to the future management of the easement.

### **B.3. HHR Equestrian Center Design**

**Comment 2.67 (Merante):** Equestrian Facility (EF)

- "the growth and financial viability of the HHR EF is dependent on the development of an effective community riding/horsemanship program."

- What is the contemplated volume of traffic if the EF "will offer programs for both HOA members and the general public?"
- is the EF an "important part of the business in generating cash flow?"

**Response 2.67:** The Equestrian Center has been removed as an element of the proposed project.

**Comment 2.68 (HHLT):** Require that the equestrian facility be closed by the town if horses are being used on the property outside of the equestrian facility in violation of the proposed conservation easement, as a requirement of site plan approval.

**Response 2.68:** The Equestrian Center has been removed as an element of the proposed project.

**Comment 2.69 (Warner):** The study does not adequately address the effects of 25 houses on the wildlife corridors in the area. But we're most concerned with the 40-horse equestrian center. We think this pushes it way over top. And even if the houses were not too much, this would clearly be too much. We question whether it adequately addresses the effects the horses will have on the wildlife. We question whether the horses will be limited to the equestrian center or will be roaming through the other areas of the property, and what effect that will have and whether there's anything in the plan that will prohibit that from happening later.

**Response 2.69:** The Equestrian Center has been removed as an element of the proposed project.

**Comment 2.70 (Lowry):** My wife and I live at 130 Horton Road, which puts us as direct neighbors to this development. We are not against development at all. We actually believe an intelligent and sound land management program that includes housing and, potentially, a stable -- is viable. What we are deeply concerned about is the scale of the equestrian center. And just draw your attention to the idea of a 40-horse barn with all the intended outbuildings, parking, circulation, waste removal, in the middle of what is already a beautiful environment that's about to be further protected with an easement. It would be like putting a factory or a gravel pit on

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Main Street. The scale makes no sense. And we are deeply concerned that this will have a negative impact not just on our immediate environment of Clove Creek, on the nature and natural habitat that are there. And we just call you attention to the scale of this proposed equestrian center and would urge you to go and walk that land and imagine what all of that waste removal is going to look like, and how it's going to function in the scale of this barn and the horses involved.

**Response 2.70:** The Equestrian Center has been removed as an element of the proposed project.

**Comment 2.71 (Tabashnick):** I think that if you look into some of their proposals pertaining, especially, with the equestrian center, you will see that in detail they want to set up a riding stable, a riding school, and a riding camp. They also want to focus their studies on this area of horsemanship called "dressage." For those who don't know this, it's a very disciplined, it's a very expensive type of horse training. And it's not very well taken by most of the horse community in the U.S. Most of the horse community, as we know, are just about riding professionally. They may be training race horses or things like that. So to imply that there is a great deal of study into this means, to me, that they didn't look at the actual specifics of what they are proposing in their equestrian community. And in -- and, in fact, what would be more likely if I would suggest to delve into is that a zoning change to make this a more commercial activity rather than a residential activity would probably be more appropriate. If they wanted to go ahead and develop a commercial equestrian center, that probably would be something that would be separate from a residential.

So trying to bring these two together does not fall under the scope of what the community probably wants of a residential facility. And if we change the scale, I think that it would probably improve the acceptance.

**Response 2.71:** The Equestrian Center has been removed as an element of the proposed project.

**Comment 2.72 (Conservation Board):** It is of critical importance that the operations of the Equestrian Center be financially successful, since management and employees of the Equestrian Center are responsible for implementing the Manure Management Plan. There are, however, no contingency plans presented anywhere in the DEIS should the income of the Equestrian Center prove inadequate to support, for example, thorough and continuous implementation of the Manure Maintenance Plan. Will Horton Road LLC backstop costs and expenses of the Equestrian Center? If so, for how long? Will the HOA provide such backstop? The importance of flawless execution of waste control and removal is such that HHR should not be approved without some contingency backstop from a responsible third party, in the event the operations of the Equestrian are less successful than projected in the DEIS.

**Response 2.72:** The Equestrian Center has been removed as an element of the proposed project.

**Comment 2.73 (Conservation Board):** In addition, the governing documents for HHR should require that monthly, quarterly, and annual financial statements for the Equestrian Center should be provided to the board of the HOA, so that the board can confirm that operations are

generating sufficient revenue for the Equestrian Center to properly perform all of its functions, including the requirements of the Manure Management Program.

**Response 2.73:** The Equestrian Center has been removed as an element of the proposed project.

**Comment 2.74 (Conservation Board):** In addition, a funding plan for recurring capital expenditures relating to pollution prevention at the Equestrian Center should be presented annually to the board of the HOA. For example, the DEIS states that the engineered floors of the 40 horse stalls will need to be rebuilt at least once every ten years, and perhaps more often, in order to function properly and prevent horse waste from leaching into groundwater. What will be the amount of such expenditures? What other, similar capital improvements or replacements will be required? How will such expenditures be funded?

**Response 2.74:** The Equestrian Center has been removed as an element of the proposed project.

**Comment 2.75 (McGinley):** I wanted to comment about the Hudson Highlands Reserve project, specifically about the care and well being of the proposed 40 horses. Much was said last night about their waste but what about their overall well being? Most of these equestrian developments that are all the rage today, are built on thousands of acres of land, most of them on flat terrain, which is conducive to grazing and exercise for the horses. This site, which is wooded and on hilly terrain, has not enough flat and open acreage to be an appropriate site for proper care of 40 horses. I could see this type of project in Millbrook, or Rhinebeck, or Bedford, but not here on this site. The proposed lives of these horses, spending most of the time in their stables with food brought in from the outside, could end up becoming quite unhealthy and a form of animal abuse. I hope that this will be addressed by the applicant.

**Response 2.75:** The Equestrian Center has been removed as an element of the proposed project.

### **B.3.a. Manure/Urine Management**

**Comment 2.76 (AKRF):** Additional information on odor control (the use of ionizers, etc.) should be incorporated into the discussion of the proposed "open walled shed" for equine waste collection/storage. The text references a maximum on-site storage period of 14 days, and odor control is a concern that has been raised, particularly during the warm summer months when usage of the equestrian center is expected to be at its peak. This storage bin does not appear to be sealed to provide any kind of odor control (based on the figure provided). The text as well as the schematic shown in Figure 24 note that this storage bin would be 40 cubic feet in size. The rationale for sizing this container, based on the maximum of 40 horses, should also be described.

**Response 2.76:** The Equestrian Center has been removed as an element of the proposed project.



**Comment 2.77 (AKRF):** Page 70 of the DEIS indicates that the entirety of the equestrian center, including all outside riding and paddocks, would be lined with an impenetrable barrier to capture runoff/leachate. This is a considerable acreage of impermeable surface that may create a runoff attenuation (or leachate capture) issue. By reducing potential impact to groundwater this approach may unnecessarily increase the size of stormwater management facilities on site. The FEIS should provide additional information on the comparison of impacts to groundwater vs. impacts to stormwater with or without the impermeable layer proposed for installation beneath the outdoor equestrian facilities. Has the SWPPP accounted for flow volume/rate that would result from the installation of this impermeable barrier? Will runoff collected from outdoor riding/paddock areas be diverted to the non-point surface water detention basins or will it be treated with septic flows? This issue speaks to the complexities of properly managing runoff from equestrian uses. This issue must be referred to the Town Engineer.

**Response 2.77:** The Equestrian Center has been removed as an element of the proposed project.

**Comment 2.78 (Farrell):** I just wanted to state that it also said, "A stabled horse produces 50 to 70 pounds of manure daily." So with 40 horses, that comes out to 2800 pounds of poop a day in our region. Again, it's a little vague on how they will handle the impact.

**Response 2.78:** The Equestrian Center has been removed as an element of the proposed project.

#### **B.4. Stormwater Management Plan**

**Comment 2.79 (AKRF):** The FEIS should confirm whether or not "storm drainage system" as listed among the common elements to be under control of the HOA includes the cisterns, retention basins, rain gardens, etc. proposed through the SWPPP or if some of those elements could occur on individually owned residential lots.

**Response 2.79:** The rain gardens are proposed on individually owned residential lots to capture roof runoff.

**Comment 2.80 (AKRF):** The FEIS should provide additional information on both the placement and maintenance of any proposed stormwater management cisterns, retention basins, rain gardens, etc., while making references to the preliminary SWPPP included as Appendix M. Will these facilities be solely within the common HOA lot (with stormwater conveyed through roadway drains/gutters) or will individual homeowners be required to construct stormwater management facilities on individual lots?

**Response 2.80:** The Stormwater Management System will be the responsibility of the HOA. While the rain gardens will be located on the individual residential lots, these elements are part of the system and, as such, will also be the responsibility of the HOA. Access to the lots is provided for in the Article IV, Section 3(g) of the "Declaration of Covenants, Restrictions, Easement..." that forms Appendix I of the DEIS. The Preliminary Stormwater Pollution Prevention Plan (SWPPP) provides preliminary data, which will, of course, change because of changes to the plan resulting from the SEQRA and Subdivision Plan review process. The

elimination of the Equestrian Center has perhaps the most direct effect. However, the general sequencing of the phases will not change significantly, nor will the principles that have guided its preparation. Placement of the rain gardens on individual lots may vary from the preliminary plan depending on the design of the individual residences. The rain gardens will be installed on the individual lots when the house on that lot is constructed. The Declaration of Covenants and Restrictions provides the easement necessary should there be a need to install other stormwater management elements on the individual lots. The bottom line is that the HOA will be responsible for the entire Stormwater Management System. See additional and more technical discussion in Response to Comment 2.92.

## **B.5. Sewer and Water**

**Comment 2.81 (Gainer):** Utility Design Considerations – General - While various project mapping illustrates overall site constraints, the "preliminary utility plan" does not. To allow for a detailed analysis of the utility designs and related disturbance issues, this information should be added to the plan.

**Response 2.81:** The overall site constraints, such as steep slopes, wetland limits and wetland buffer limits, along with the limit of disturbance line, are now shown on the Preliminary Utility Plans.

**Comment 2.82 (Gainer):** Sanitary Sewers - Due to the drawing's scale, the sanitary sewer layout illustrated on the plan is difficult to read. Its clarity could be improved if the sanitary improvements were highlighted in color, better labeled and a legend added for the various symbols used.

Various lots or other facilities appear to be incorrectly labeled on the sanitary profiles. For example, the facilities needed to serve lots 24 & 25 are mis-labeled on the profiles. The preliminary design information should be further reviewed and corrected wherever necessary.

The facilities showing at the rear of Lot 21 should be labeled and their purpose explained.

**Response 2.82:** The plans were developed at 100 scale and are difficult to read. The Utility Sheets have now been enlarged to 50 scale and utilize color for the different utility lines to assist in clarification. Additionally, the profile sheets have been reviewed and modified to ensure they correctly correspond to the plans.

The lines of Lot 23 have been reconfigured so that the common facilities (common septic tanks and sewage pump station) will be located on common property and not on Lot 23. An access driveway has also been added to the plans to facilitate occasional inspection/monitoring.

**Comment 2.83 (Gainer):** Fire Protection - all Fire protection measures proposed for the project should be identified, including any suction hydrants within existing water resources on the tract. Appropriate access to, and required maintenance of, such facilities should be specified in the EIS documents.

**Response 2.83:** The plan originally envisioned "suction hydrants" or "dry hydrants" as they are often called. Because of the difference in elevation between Ulmar Pond and most of the

proposed houses, and because of the disturbance that would have to occur within 100 feet of Ulmar Pond, the designers have suggested and the sponsor has opted to equip each of the houses with an individual sprinkler system. An individual sprinkler system does not have to wait until the fire company arrives. It will provide immediate and automatic fire suppression.

The Town Engineer has characterized the Project Sponsor's plan to sprinkle all residential housing as beneficial. It is recognized that fire departments in rural areas often seek to have suction hydrants placed in local ponds and lakes for fire-fighting purposes. As Ulmar Pond is lower than most of the lots and roadways in the planned development, installation of the equipment along the pond's edge would require construction of a roadway and related infrastructure in order to make the hydrant functional. Throughout the project's layout and design, mitigation measures have been identified to protect the pond from the potential adverse impacts of the project's development, and so disturbances in the immediate area of the pond have been avoided. However, this matter will again be referred to the North Highland Engine Company for further review. If such a suction hydrant is included in their recommendations, the potential negative effects of these disturbances on the condition of the pond will be considered and mitigated as appropriate.

**Comment 2.84 (Conner):** Please explain the septic system as planned. We were given to understand that there would be one central system, but the HHR website at <https://www.hudsonhighlandreserve.com/news> says "Domestic water will be provided by individual wellheads, while septic systems will be organized and phased to three separate septic fields."

**Response 2.84:** The HHR web site may have indicated three septic areas as the existing septic for the commercial building and one of the existing residences will remain in use and not go to the new common septic system. The Hudson Highlands Reserve common septic system will not have three Absorption Areas. It will have a single Primary Area for the Absorption Fields, which has been identified on the subdivision plans. It will also have a Reserve Area that will not be utilized unless there is a system failure. As the Primary Area will be professionally maintained, failure is less likely to occur and use of the Reserve Area is less likely to be required.

There are several components to the septic system. They are:

- **Collection System** – Waste from the residences leave through a pipe that connects to the collection system. A collection system is a series of pipes (sewer lines) and manholes that carry the waste by gravity to a central point. This central point in the HHR system will be located at the pumping station where, in addition to the pump station there will be a series of septic tanks. The collection system will discharge the waste into the septic tanks.
- **Septic Tanks** – Once the waste enters one of the septic tanks, the waste water will pass through baffles that trap the solids, separating them from the liquids. The solids will be retained in the tank. The solids will accumulate and will be periodically pumped out of the tank by a service provider who will remove and transport them to a treatment facility. The liquids, called effluent, will be allowed to flow out of the septic tanks and into pipes that will carry them to the pump station. It is important to note that in most residential developments, septic tanks are typically set on individual lots, with each lot having its

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own tank and septic system. Septic tanks need to be pumped out on a regular schedule or they will fail and allow the solids to escape and foul (clog) the absorption fields. Because the septic tanks in the HHR system will be centrally located, they will be professionally managed and regular maintenance will be assured. Periodic maintenance eliminates a significant source of septic system failures.

- **Pump Station** – The pumping system will pump the effluent through a force main uphill to the absorption fields.
- **Absorption Fields** - There are two distinct areas set aside for the absorption fields. One is called the Primary Area. The other is called the Reserve Area. The Primary area is where the absorption system is actually installed. The Reserve Area is just that, a spare. It is an area that has been proven capable of accepting the effluent should the Primary Area ever fail. Proper maintenance of the Primary Area makes the need to use the Reserve Area uncommon.

Because the absorption area is going to service 24 houses (the original Frisenda house will retain use of its current disposal field), it is considerably larger than the absorption field for a single home. Similarly, it will receive approximately 24 times the amount of liquid that would be produced by a single home. Because the absorption fields are so large, it is necessary to make sure that the effluent is distributed throughout the system so that no one area becomes over saturated and thus non-functional. On simple smaller systems this is not a problem, the flow from one house is sufficient to “charge” the entire system. On larger single family home systems, this can be a problem, but it is overcome by storing the liquids in a tank until there is sufficient liquid to “charge” the entire system at once, letting the liquids absorb while the tank is being refilled. This is called a dose. On a large system, the same principle is applied, but on a larger scale. One way this is accomplished is by dividing the absorption area into two or more sections and charging each section individually on a rotating basis. This provides additional time for each area to absorb its dose and assures that the entire system is fully utilized. When a system is split in this manner, it has the additional advantage of being able to take one section out of service when maintenance is needed, without interruption of service. Such is the plan for Hudson Highlands Reserve, a single Absorption Area with three or more dosed sections.

Before the effluent is released into the absorption fields it will be aerated. Aeration introduces oxygen into the effluent, which allows for aerobic bacteria to become part of the treatment chain. Aerobic bacteria are more plentiful than anaerobic bacteria so the aerator improves the overall effectiveness of the treatment system. The increased bacteria population increases the system’s effectiveness in breaking down (cleaning) the waste water both in the tank and when passing through the fields. Because the system is a large common septic system, the treated effluent will be sent to the fields in doses, at a set volume. Each dose will be directed to a different section of the field allowing each section to rest between doses. As the waste water is slowly released from the perforated pipes the bacteria will continue to take up the nutrients in it and it is cleaned (scrubbed) by the biomass and eventually the soil. The treated effluent recharges into the surrounding soil and becomes part of the groundwater. To ensure that the liquid does not enter the groundwater before it is clean, the Putnam County Health Department, and indeed, the State of New York have strict rules regarding the design of all septic systems that take into consideration the quality and minimum depth of the soil below the bottom of the fields.

## **B.6. Site Access**

**Comment 2.85 (Gainer):** Project Access - From early on in the Board's review process, recognizing the poor geometry, limited width, and other related factors concerning the existing Town roadways bordering the site, as well as the expected traffic to be generated within the project and especially considering the transportation impacts of the equestrian center proposed, the Planning Board determined that that the project's access should only be obtained from NYS Route 9. More recently, the Town of Philipstown Highway Superintendent has expressed similar concerns and does not support any routine use of either Horton Road or East Mountain Road North for access to the proposed development.

Nevertheless, based upon limited technical supporting documentation that has apparently been submitted to their office by the applicant's consultants, the New York State Department of Transportation (NYS DOT) has advised that they do not currently support project access from NYS Route 9. It is therefore necessary that, as part of this EIS process, the applicant must conclusively establish to the satisfaction of NYS DOT that suitable mitigation/roadway improvements shall be constructed by the applicant along the Route 9 corridor so as to permit that agency to grant such access so as to avoid adverse impacts to the adjacent Town roadways.

**Response 2.85:** The Project Sponsor has been coordinating with NYSDOT and providing them with the information required to secure approval for the US Route 9 access. In a letter dated July 26, 2019, NYSDOT indicated that there were 5 items required to be addressed to close the permitting process for the access and advise the Project Sponsor that "coordination will be necessary" between the Department and the Project Sponsor as NYSDOT will be raising the bridge over the creek immediately south of the site and "this will affect the design of the Applicant's driveway".

The NYSDOT applies significant scrutiny to every application and the Hudson Highlands Reserve project will be subject to that scrutiny. The Project Sponsor continues to develop its plans and reports, including a drainage report and the sight distances that will be available to motorists. The permit will only be approved when the NYSDOT has made the Project Sponsor address potential impacts associated with the proposed intersection. For a more complete discussion, please see Responses 2.87 and 2.88.

**Comment 2.86 (Gainer):** Project Roadway layouts - It is recognized that a primary goal of conservation subdivisions is to preserve the rural appearance and environmental resources of the Town. Therefore, while secondary emergency access to the site represents an appropriate design consideration, this should be accomplished with the least impact to the site's identified sensitive lands. Given this, it would appear that the proposed secondary access that will extend out to Horton Road seems redundant, especially since an access already exists to this roadway which serves other residences adjacent to the project. Elimination of the project's secondary, emergency access would provide larger wildlife buffers in an area encumbered by seeps, wetlands, and stream corridors. The applicant should further review whether the existing access out to Horton Road could serve as the emergency access envisioned.

**Response 2.86:** The plan provides two emergency access routes. One is at the southerly end of the project, at Horton Road. The other is at the northerly end of the project at East Mountain

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Road North. Both are built. Both are serviceable. Because of the north/south length of the project and the fact that the traveled ways are already constructed, the plan is to provide the extra measure of safety by keeping both routes in service as emergency access routes.

However, Mr. Gainer's observation is correct. There are two accesses that connect to Horton Road. Both cross through wetlands and both are currently serviceable. One is a portion of the historic road that currently serves as the original driveway into the Ulmar House, which will become Lot 20. This is an old roadway with little formal drainage. It passes by the existing residence that is to be razed. The other access is more recently constructed with drainage features that allow the hillside wetlands to pass beneath and reach Ulmar Pond. The Project Sponsor chose the newer access because it provides the most direct route to the proposed homes over a roadway that was built to the Open Development Roadway standards of the Town. The decision was influenced by the fact that the other access, which is to be abandoned and blocked, will not be required after the subdivision is complete. It will still provide access to the Ulmar House, but as a driveway accessed from the new internal roadway system to the north.

**Comment 2.87 (McCullough - NYSDOT):** We note again that there is no mention of traffic in the DEIS and the actual Traffic Impact Analysis and/or NYSDOT comments of August 2, 2018 are not included in the Appendix.

Mr. Watson's July 12, 2018 letter states that "The reason that 'Traffic' was not included in the draft scoping document is that the question was answered to the satisfaction of the Planning Board during the Conservation Analysis and EAF process. We are glad the Planning Board's concerns were answered, but what about everyone else? This is a Public document; you need to say you looked at it as part of the SEQR process and state your conclusions. Therefore, under 6 NYCRR Part 617 State Environmental Quality Review (SEQR), as an Involved Agency, we are unable to endorse the DEIS for this project.

We are wondering if the Applicant addressed any of the NYSDOT comments or the request for additional information (i.e. Drainage Report, Site Distance Matrix). I have included past letters and our comment report requesting certain items be addressed. Please address all comments prior to issuance of the Final EIS.

**Response 2.87:** The Scope of the DEIS is the responsibility of the Lead Agency, not the Project Sponsor. The Planning Board, as Lead Agency, adopted the scope and chose not to include traffic. This was decided after reviewing all available information, including the report that Mr. Watson transmitted to the NYS Department of Transportation (NYSDOT) with his July 12, 2018, letter. The Planning Board is aware of the scrutiny applied by the NYSDOT for any application to connect a new road or driveway directly onto a State Highway.

In its June 1, 2018, report to the Planning Board, its consultants, AKRF reported as follows: "Transportation - The EAF included a detailed Traffic Impact Study, which traffic engineers at AKRF reviewed and determined to be sufficient for the purposes of determining significance. While site design issues (e.g., grade of entrance road and turning radius of various turns) should be further reviewed during subdivision approval, AKRF feels that no significant adverse impact would result from traffic, including occasional horse trailers accessing the site."

In the instant situation, the Planning Board, after advice from its consultants concluded that the information provided by the Project Sponsor's consultant and the design standards that would be enforced by the NYSDOT would provide sufficient mitigation to any traffic impacts and need not be addressed in the DEIS.

**Comment 2.88 (Conner):** How does the applicant plan to resolve the access issues presented by the June 7, 2019 DOT letter from Mary McCullough?

**Response 2.88:** Ms. McCullough's June 7, 2019, letter was followed by her subsequent letter dated July 26, 2019, in which she enumerated 5 items that would be required to be addressed to close the permitting process for the proposed access. Ms. McCullough also advised that "coordination will be necessary" between the Department and the Project Sponsor as NYSDOT will be raising the bridge over the creek immediately south of the site and "this will affect the design of the Applicant's driveway". For a more complete discussion, please see Responses 2.85 and 2.87.

**Comment 2.89 (AKRF):** COMMUNITY CHARACTER Regarding this language on page 120: "...the applicant's designers made certain that Horton Road and East Mountain Road North would not be used for any routine access to the project. It is noted that access to both of these Town roads will be maintained for emergency purposes only..." - how have the applicant's designers made certain that these critical roads will not be used for routine access, and will solely be used for emergency purposes? For example, have the designers included barriers or automated gates along the periphery of those roads with access only for emergency personnel? Please include more information on how this has been made certain, and how the current plan is code-compliant with the minimum design requirements for emergency access.

**Response 2.89:** Section D107.1 of Appendix D of the 2020 Fire Code of New York State (Fire Code) requires that two separate and approved fire apparatus access roads be provided when a development contains 30 or more lots, unless the houses are equipped with sprinklers. Hudson Highlands Reserve is a 24-lot development. Thus, only one (1) fire apparatus access road need be provided. Moreover, each of the houses in the Hudson Highlands Reserve project will be sprinklered, and it is therefore also exempt on that basis.

The main entrance road is from Route 9. It will be called Highland Trail. It is the most desirable access point to the Town (See Comment 2.85). It meets all requirements of a fire apparatus access road with the exception of the 10% maximum grade. However, it is within authority of the Fire Official to allow a grade steeper than 10%. The Project Sponsor is seeking the Fire Official's permission to allow the 12% grade for that section of the Highland Trail between Route 9 and the residential area of the development.

There are four roads in the Hudson Highlands Reserve. They are:

1. Highlands Trail, the main road from Route 9 through the property. The road travels from Route 9 to the east to a T intersection. To the north of the intersection is the driveway for Lot 1 which continues to the emergency access road to East Mountain Road North, and to the south, the road provides access to the three other subdivision roads and eventually ends in a cul-de-sac;
2. Forest Court, a short dead-end road that runs east from Highlands Trail;

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3. Ulmar Pond Drive, a short dead-end road northwest of Ulmar Pond that runs southwesterly from Highlands Trail; and
4. Reserve Road, a short dead-end road east of Ulmar Pond that runs south from Highlands Trail, and ends in a cul-de-sac for normal use and the emergency access connection that extends to Horton Road.

Highland Trail, Forest Court and Reserve Road end with a 100' diameter cul-de-sac that exceeds the 96-foot diameter specified in the *2020 Fire Code of New York State*. Ulmar Pond Drive serves just two parcels. It is configured with an alternate hammerhead turnaround that is specified in the 2020 Fire Code of New York State as a turnaround alternative to a cul-de-sac.

In addition to the main entry, the designers have proposed two emergency access roads to the site.

The first of the two separate and (to be) approved fire apparatus access roads proposed is the "Emergency Access Road" at the southern end of the parcel. It connects the end of Horton Road, a Town Road, to the cul-de-sac at the end of Reserve Road. The traveled-way of this route from Horton Road was built under the Open Development Area Regulations, a Town standard that is widely used in Philipstown. As demonstrated on the profiles in the plan set, its grade does not exceed 10% as specified in Section D103.2 of the Fire Code. The traveled-way of this road is 14 feet wide. The minimum centerline radius of this route is 325 feet, far greater than the 75 feet specified for a private road and not expected to be an issue under Section D103.3 of the Fire Code.

Regardless that it is not required, a second emergency access route is provided at the north end of the property. This route is over the driveway from East Mountain Road North to the former Frisenda House, which will become Lot 1 in the Hudson Highlands Reserve Development. The driveway is 10 feet wide, as are many driveways in Philipstown. The overall grade of the steepest part of the driveway is 10%, but there are some portions of the driveway that are steeper. Grading will be required to bring the driveway to a maximum grade of 12 percent in those short areas. While the grade is slightly beyond the recommended maximum, it is well within standards normally applied by the Fire Official in Philipstown. The driveway grade flattens at approximately 500 feet from the center of East Mountain Road North. The minimum centerline radius of this route is 200 feet, again far greater than the 75 feet specified for a private road and not expected to be an issue under Section D103.3 of the Fire Code.

The designers have specified that locked gates will be provided at the Horton Road and East Mountain Road North emergency entries to the site. The gates will prevent routine use of either emergency access route. As specified on the revised plan, each gate will be equipped with a "Knox Box". Essentially, a "Knox Box" is a small key safe, within which another key is stored. At Hudson Highlands Reserve, the key in the "Knox Box" will be a key to the adjacent gate. The Fire Department will be provided with a key to the "Knox Box." Should there come a time when access to the Hudson Highlands Reserve via one or the other of the emergency access routes is required, the Fire Company will be able to open the gate and gain access. Additional information regarding "Knox Boxes" is available at <https://www.knoxbox.com/>.

Under the proposed plans, Lot 1, or the Frisenda House, as it has been known, will no longer utilize its driveway that connects to East Mountain Road North. A new driveway will be



constructed from Highlands Trail to the end of the existing Frisenda House driveway. The grade between the two ends is relatively gentle and easily connected. To utilize the East Mountain Road North Emergency Access Route, the new and old driveway will have to be connected so that it is passable to emergency and other vehicles, and an Emergency Access Easement will be provided across Lot 1.

**Comment 2.90 (Anspach):** However, at this late date, what is even more revealing about the intentions of this developer, is his duplicity in addressing the required traffic study for this project. When neighbors objected to access being on the winding and narrow roads and Horton Street and East Mountain Road North, the developer was quick to claim that those roads would only be in cases of emergency, and access to the project would be directly from Route 9. Apparently, since 2014, the New York State DOT has been asking for details regarding this proposed Route 9 access. After the 2018 scoping sessions, the DOT raised a number of issues. To date, those DOT concerns have not been addressed. And to quote from their June 7th, 2019, letter to the planning board and I quote, "Therefore under 6NYCRR, part 7 -- part 617 of SEQRA as an involved agency, we are unable to endorse the DEIS for this project."

**Response 2.90:** As proposed, neither Horton Road nor East Mountain Road North will be utilized for primary access to the subdivision. The traffic study, assuming Route 9 access, was shared with NYSDOT early in the SEQRA process, and subsequent discussions have occurred between the Project Sponsor's engineer and NYSDOT since the issuance of their June 7, 2019 letter. The Project Sponsor's engineer has since stated that any prior confusion has been resolved.

## **C. Construction and Maintenance**

### **C.1. Construction**

**Comment 2.91 (Gainer):** Project Design considerations - Construction Standards - Although Town roadway standards specify a maximum grade of 10%, it is understood that some relief will be sought for both roadway grades and consideration of alternate roadway construction standards for access to the individual lots. While grades of up to 12% may be warranted along the entrance roadway in order to both obtain access from Route 9 and to minimize the extent of cuts and fills along its profile, all other roadways should comply with maximum grade requirements.

**Response 2.91:** The revised plan no longer contains proposed road grades that exceed 10%, except for the main entry road from Route 9 into the project. For the reasons stated by Mr. Gainer, a portion of the entry road is proposed to have a maximum grade of 12%. This modification of the road standard is the subject of an application for approval of Alternate Road Standards. The maximum grade of the rest of the proposed road on the revised plan is 9%.

**Comment 2.92 (Gainer):** Construction Sequencing/Project Phasing - Beyond an understanding of the overall project design envisioned by the applicant, it is necessary for the applicant to provide a detailed explanation of the manner that the project will be phased to assure that the construction of all required project infrastructure proceeds logically. Provided that NYS DOT ultimately authorizes the Route 9 access currently proposed, the extent of

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construction envisioned (which must conform with minimum phasing requirements of 276 of NYS Town Law) should be explained. The timing of the equestrian center's construction should also be noted, as well as whether any aspects of this facility will be phased.

**Response 2.92:** First, it is noted that the equestrian center has been eliminated from the project design and will not factor into the construction sequence.

Because the project disturbs more than 5 acres, the limits of the common construction have been divided into 8 phases, which is depicted on the following page. It is not necessary to complete construction of each phase before moving to the next. However, no more than 5 acres may be disturbed at any one time. Following is the proposed construction sequencing. The construction sequence includes those steps indicated in Section VII of the Stormwater Pollution Prevention Plan included as Appendix M of the DEIS. The Construction Sequencing Plan is depicted on Figure 5 on the following page.

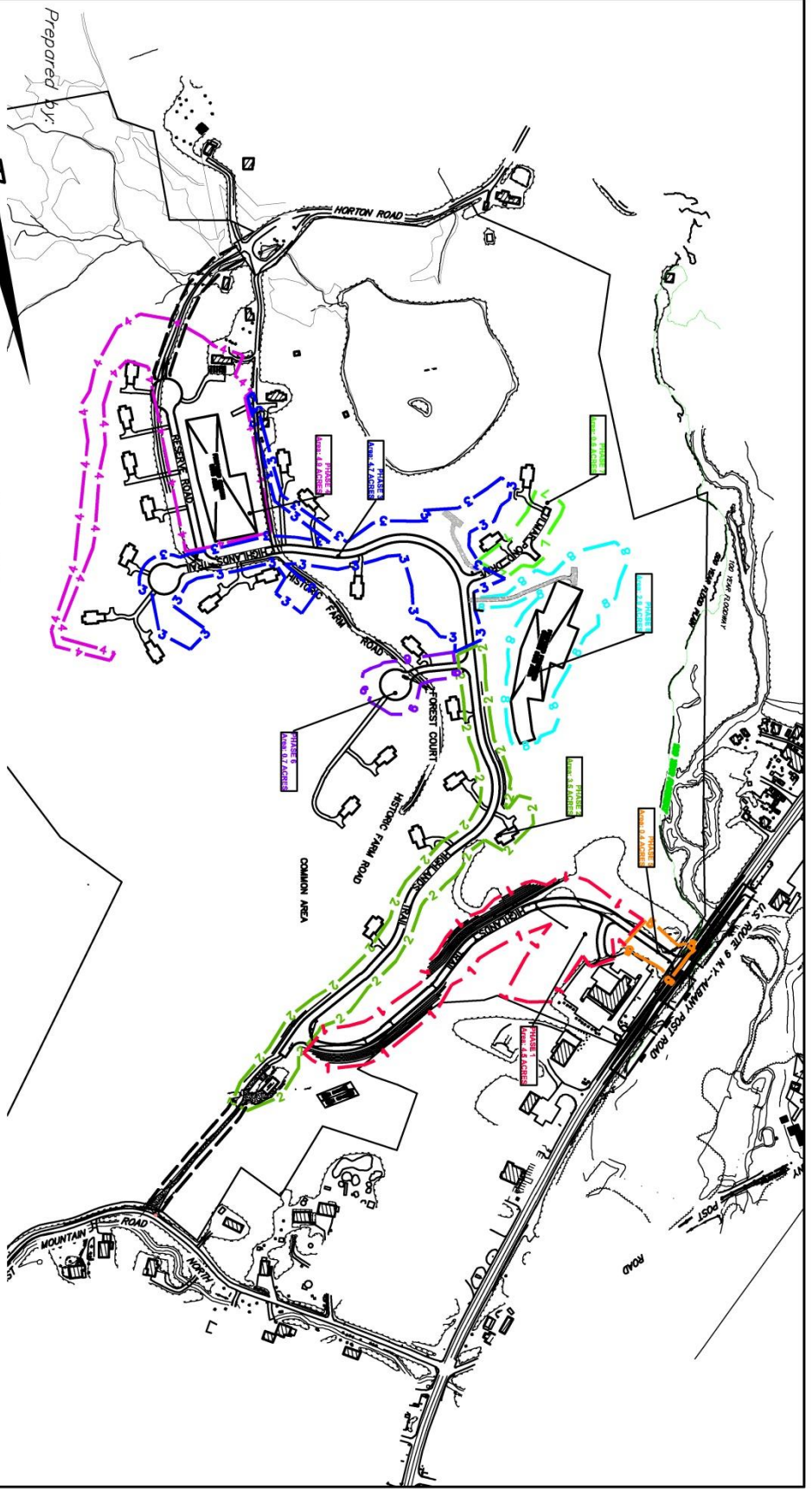
The limits of Phase 1 shown on Figure 5 capture a portion of the commercial lot that is part of the project site. The project designers show this area with grading and in greater detail on Sheet 6 of 19 of the Preliminary Plan set that is Appendix I to this FEIS. It is noted that Sheet 6 of Appendix I provides a connection through the Commercial Lot, which eliminates the need to construct Phase 5 at the onset of the project. According to the Project Sponsor, this was done so that greater control can be exercised over people entering the property. Utilizing the commercial building as a sales office will enable visitors to the project to be introduced and accompanied through the site in a safer and controlled manner.

To better illustrate the work within each of the phases, the project engineer has created two 50 scale phasing plans utilizing the site utility plans as a base. They are included in the Preliminary SWPPP rather than as part of the plan set, and will continue to be included in the Final SWPPP for the project.

## CONSTRUCTION SEQUENCING

### 1. Pre-Construction

- a) This project has not received written approval from the MS4, Town of Philipstown or the NYSDEC to allow disturbance of more than five acres of land at any one time. Therefore, if the contractor's construction sequence requires the disturbance of more than five acres at any one time, the contractor must obtain written approval from the NYSDEC prior to disturbing more than five acres at any one time.
- b) Obtain plan approval and all other applicable permits.
- c) Mobilize construction vehicles, equipment, materials, and trailers.
- d) Stake and flag construction and work limits of disturbance for Phase 1, including right-of-way (row) edge, off-row access roads, staging areas, and no-access areas.
- e) Conduct a pre-construction conference with involved agencies at least one week prior to the start of construction. At a minimum the town engineer, town wetland inspector, project engineer, general contractor and owner must attend the meeting. The meeting is to be held on site.
- f) Mark and stake out underground and overhead utilities.



PREPARED FOR  
**HUDSON HIGHLANDS RESERVE**  
 SITUATE IN THE  
**TOWN OF PHILIPSTOWN**  
 PUTNAM COUNTY

March 3, 2022  
**BADEY & WATSON**  
 SURVEYING & ENGINEERING, P.C.

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Drawing Name: Phasing Plan

Layout: PHASES

W.O. No.: 21792

FILE No. 86-228

Figure 5: Construction Sequencing Plan

- g) Trees must be felled between November 1 and March 31. The contractor may fell all trees within the limits of disturbance provided stumps are not removed. The trees may then be removed from site when a road has been sufficiently developed to accommodate the equipment necessary for their removal. Felling the trees without removing the stumps is not considered land disturbance.

## 2. Phase 1

- a) Phase 1 consists of creating an entrance to the property from the rear of the existing commercial building and constructing the Highlands Trail from station 3+00 to 15+00. The bioretention area should not be constructed until all areas that contribute runoff to it have been stabilized.
- b) Install stabilized construction entrances and all silt fences and erosion control measures.
- c) Surround all bioretention and raingarden areas with orange construction fence to avoid compaction.
- d) Grub all areas to be constructed.
- e) Construct any temporary sediment basins and stabilize the areas disturbed for the construction of the temporary sediment basins.
- f) Install silt fencing around the temporary topsoil stockpile location(s).
- g) Proceed with rough grading of the area under active construction, including construction of temporary diversion swales and stone check dams as required to convey stormwater runoff to the temporary sediment basins. Exposed areas shall be stabilized within 14 days.
- h) Build access road from behind commercial building.
- i) Install the storm drainage system consisting of swales, catch basins, manholes and underground storm pipes from the Stormwater Management Areas throughout the site along with the sediment and erosion control devices associated with the storm drainage system (i.e., inlet protection, stone check dams, etc., as will be shown on the Plans).
- j) Install any underground utilities (sewer, electric, telephone, etc.), as required.
- k) Begin building Highlands Trail roadway construction including foundations, curb, subbase and base pavement sections.
- l) Finish grading, redistribute topsoil and establish vegetation and/or landscaping.

## 3. Phase 2

- a) Phase 2 consists of extending Highlands Trail from station 15+00 to Forest Court. The bioretention area should not be constructed until all areas that contribute runoff to it have been stabilized.
- b) As Phase 1 is stabilized move into Phase 2 by first installing all erosion and sediment control measures for Phase 2.
- c) Re-install stabilized construction entrances as necessary and where warranted. Install all silt fences and erosion control measures.
- d) Surround all bioretention and raingarden areas with orange construction fence to avoid compaction.

- e) Grub all areas to be constructed.
- f) Construct any temporary sediment basins and stabilize the areas disturbed for the construction of the temporary sediment basins.
- g) Install silt fencing around the temporary topsoil stockpile location(s).
- h) Proceed with rough grading of the area under active construction, including construction of temporary diversion swales and stone check dams as required to convey stormwater runoff to the temporary sediment basins. Exposed areas shall be stabilized within 14 days.
- i) Install the storm drainage system consisting of swales, catch basins, manholes and underground storm pipes from the Stormwater Management Areas throughout the site along with the sediment and erosion control devices associated with the storm drainage system (i.e., inlet protection, stone check dams, etc., as will be shown on the Plans).
- j) Install any underground utilities (sewer, electric, telephone, etc.), as required.
- k) Continue building Highlands Trail roadway construction including foundations, curb or gutter, subbase and base pavement sections.
- l) Begin construction of model home.
- m) Finish grading, redistribute topsoil and establish vegetation and/or landscaping.

#### 4. Phase 3

- a) Phase 3 consists of extending Highlands Trail from Forest Court to its end just past Reserve Road and installation of the septic tanks and pump station for the common septic system. The bioretention area should not be constructed until all areas that contribute runoff to it have been stabilized.
- b) As Phase 2 is stabilized move into Phase 3 by first installing all erosion and sediment control measures for Phase 3.
- c) Re-install stabilized construction entrances as necessary and where warranted. Install all silt fences and erosion control measures.
- d) Surround all bioretention and raingarden areas with orange construction fence to avoid compaction.
- e) Grub all areas to be constructed.
- f) Construct any temporary sediment basins and stabilize the areas disturbed for the construction of the temporary sediment basins.
- g) Install silt fencing around the temporary topsoil stockpile location(s).
- h) Proceed with rough grading of the area under active construction, including construction of temporary diversion swales and stone check dams as required to convey stormwater runoff to the temporary sediment basins. Exposed areas shall be stabilized within 14 days.
- i) Install the storm drainage system consisting of swales, catch basins, manholes and underground storm pipes from the Stormwater Management Areas throughout the site along with the sediment and erosion control devices associated with the storm drainage system (i.e., inlet protection, stone check dams, etc., as will be shown on the Plans)
- j) Install any underground utilities (sewer, electric, telephone, etc.), as required.

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- k) Continue building Highlands Trail roadway construction including foundations, curb or gutter, subbase and base pavement sections.
  - l) Install the septic tanks and pump station for the common septic system.
  - m) Finish grading, redistribute topsoil and establish vegetation and/or landscaping.
5. Phase 4
- a) Phase 4 consists of installation of a diversion swale on the hillside, construction of Reserve Road and installation of the fields for the common septic area. The bioretention area should not be constructed until all areas that contribute runoff to it have been stabilized.
  - b) As Phase 3 is stabilized move into Phase 4 by first installing all erosion and sediment control measures for Phase 4.
  - c) Re-install stabilized construction entrances as necessary and where warranted. Install all silt fences and erosion control measures.
  - d) Surround all bioretention and raingarden areas with orange construction fence to avoid compaction.
  - e) Grub all areas to be constructed.
  - f) Construct any temporary sediment basins and stabilize the areas disturbed for the construction of the temporary sediment basins.
  - g) Install silt fencing around the temporary topsoil stockpile location(s).
  - h) Proceed with rough grading of the area under active construction, including construction of temporary diversion swales and stone check dams as required to convey stormwater runoff to the temporary sediment basins. Exposed areas shall be stabilized within 14 days.
  - i) Install the storm drainage system consisting of swales, catch basins, manholes and underground storm pipes from the Stormwater Management Areas throughout the site along with the sediment and erosion control devices associated with the storm drainage system (i.e., inlet protection, stone check dams, etc., as will be shown on the Plans).
  - j) Build the diversion swale.
  - k) Build fields for the common septic area.
  - l) Install any underground utilities (sewer, electric, telephone, etc.), as required.
  - m) Begin building Reserve Road roadway construction including foundations, curb or gutter, subbase and base pavement sections.
  - n) Finish grading, redistribute topsoil and establish vegetation and/or landscaping.
6. Phase 5
- a) Phase 5 consists of constructing Highlands Trail from station 300 to its connection with US Route 9. The bioretention area should not be constructed until all areas that contribute runoff to it have been stabilized.
  - b) As Phase 4 is stabilized move into Phase 5 by first installing all erosion and sediment control measures for Phase 5.

- c) Prior to conducting any work in the NYS Route 9 right-of-way ensure all permits are in place and the NYSDOT has been notified that work is to start. If inspection of work in the right-of-way is required by the permit, ensure the inspector is on site during construction. Any improvements that may be required within the row must be completed prior to opening Highlands Trail to traffic.
- d) Re-install stabilized construction entrances as necessary and where warranted. Install all silt fences and erosion control measures.
- e) Surround all bioretention and raingarden areas with orange construction fence to avoid compaction.
- f) Grub all areas to be constructed.
- g) Construct any temporary sediment basins and stabilize the areas disturbed for the construction of the temporary sediment basins.
- h) Install silt fencing around the temporary topsoil stockpile location(s).
- i) Proceed with rough grading of the area under active construction, including construction of temporary diversion swales and stone check dams as required to convey stormwater runoff to the temporary sediment basins. Exposed areas shall be stabilized within 14 days.
- j) Install the storm drainage system consisting of swales, catch basins, manholes and underground storm pipes from the Stormwater Management Areas throughout the site along with the sediment and erosion control devices associated with the storm drainage system (i.e., inlet protection, stone check dams, etc., as will be shown on the Plans).
- k) Install any underground utilities (sewer, electric, telephone, etc.), as required.
- l) Continue building Highlands Trail roadway construction including foundations, curb or gutter, subbase and base pavement sections.
- m) Finish grading, redistribute topsoil and establish vegetation and/or landscaping.

7. Phase 6

- a) Phase 6 consists of the construction of Forest Court.
- b) As Phase 5 is stabilized move into Phase 6 by first installing all erosion and sediment control measures for Phase 6.
- c) Re-install stabilized construction entrances as necessary and where warranted. Install all silt fences and erosion control measures.
- d) Surround all bioretention and raingarden areas with orange construction fence to avoid compaction.
- e) Grub all areas to be constructed.
- f) Construct any temporary sediment basins and stabilize the areas disturbed for the construction of the temporary sediment basins.
- g) Install silt fencing around the temporary topsoil stockpile location(s).
- h) Proceed with rough grading of the area under active construction, including construction of temporary diversion swales and stone check dams as required to convey stormwater runoff to the temporary sediment basins. Exposed areas shall be stabilized within 14 days.

- i) Install the storm drainage system consisting of swales, catch basins, manholes and underground storm pipes from the Stormwater Management Areas throughout the site along with the sediment and erosion control devices associated with the storm drainage system (i.e., inlet protection, stone check dams, etc., as will be shown on the Plans).
- j) Install any underground utilities (sewer, electric, telephone, etc.), as required.
- k) Begin building Forest Court roadway construction including foundations, curb or gutter, subbase and base pavement sections.
- l) Finish grading, redistribute topsoil and establish vegetation and/or landscaping.

8. Phase 7

- a) Phase 7 consists of the construction of Ulmar Pond Drive.
- b) As Phase 6 is stabilized move into Phase 7 by first installing all erosion and sediment control measures for Phase 7.
- c) Re-install stabilized construction entrances as necessary and where warranted. Install all silt fences and erosion control measures.
- d) Surround all bioretention and raingarden areas with orange construction fence to avoid compaction.
- e) Grub all areas to be constructed.
- f) Construct any temporary sediment basins and stabilize the areas disturbed for the construction of the temporary sediment basins.
- g) Install silt fencing around the temporary topsoil stockpile location(s).
- h) Proceed with rough grading of the area under active construction, including construction of temporary diversion swales and stone check dams as required to convey stormwater runoff to the temporary sediment basins. Exposed areas shall be stabilized within 14 days.
- i) Install the storm drainage system consisting of swales, catch basins, manholes and underground storm pipes from the Stormwater Management Areas throughout the site along with the sediment and erosion control devices associated with the storm drainage system (i.e., inlet protection, stone check dams, etc., as will be shown on the Plans).
- j) Install any underground utilities (sewer, electric, telephone, etc.), as required.
- k) Begin building Ulmar Pond Drive roadway construction including foundations, curb or gutter, subbase and base pavement sections.
- l) Finish grading, redistribute topsoil and establish vegetation and/or landscaping.

9. Phase 8

- a) Phase 8 consists of the construction of the fill pad for the reserve septic area.
- b) As Phase 7 is stabilized move into Phase 8 by first installing all erosion and sediment control measures for Phase 8.
- c) Re-install stabilized construction entrances as necessary and where warranted. Install all silt fences and erosion control measures.
- d) Grub all areas to be constructed.



- e) Construct any temporary sediment basins and stabilize the areas disturbed for the construction of the temporary sediment basins.
- f) Install silt fencing around the temporary topsoil stockpile location(s).
- g) Proceed with rough grading of the area under active construction, including construction of temporary diversion swales and stone check dams as required to convey stormwater runoff to the temporary sediment basins. Exposed areas shall be stabilized within 14 days.
- h) Build fill pad for reserve septic area.
- i) Finish grading, redistribute topsoil and establish vegetation and/or landscaping.

10. Close out

- a) Construction of individual house lots can commence during any phase of construction provided the amount of disturbance on the site at any one time does not exceed 5 acres.
- b) Final top coat of pavement will not be applied until all houses are constructed or as otherwise agreed with town engineer.
- c) The contractor shall keep records of: daily and weekly inspections of the construction site; and documentation of soil disturbances and site restoration/soil stabilization.
- d) The contractor shall keep records of inspection and record maintenance.
- e) The contractor shall keep records of final stabilization and project closeout.
- f) Complete any final grading, topsoil and establish vegetation and/or landscaping.
- g) Clean pavements and storm drain system of all accumulated sediment in conjunction with the removal of all temporary sediment and erosion control devices.
- h) Complete construction throughout the site and stabilize the exposed areas.
- i) Issue Notice of Termination (NOT).

**Comment 2.93 (Gainer):** Control over limits on disturbed areas within individual lots - "Limits of Disturbance" lines extend through portions of most individual lots planned within the project. The manner that these could reasonably be enforced should be explained, or otherwise it should be acknowledged that overall project disturbances will be greater than that currently outlined.

**Response 2.93:** The Project Sponsor's engineer developed the limit of disturbance lines in an effort to calculate a reasonable estimate of the projected area of disturbance. The lines are not meant to be restrictive or regulatory in any way. The actual limit of disturbance may differ somewhat, but the lines shown are a reasonable estimate based on topography, projected grading, and anticipated construction methods. However, as explained below, it is believed that while the actual boundaries may differ from that shown, the area of disturbance shown is an accurate estimate of what would be expected to occur with the proposed project.

The Project's goal is to develop a subdivision that is sustainable and respectful of the environment while allowing flexibility in design. It is this concept that has driven the design process.

The proposed development is clustered in the area most suitable for development and the size of the lots has been limited to around one acre. A Home Owners Association (HOA) will be established in which lot owner membership will be required. Membership requires adherence to the rules and regulations of the HOA. In addition to providing a mechanism for maintenance and repair of the common facilities, the HOA "Declaration of Covenants and Restrictions ...," and "By-Laws ...," (Appendices I & J of the DEIS, respectively) establish an Architectural Review Board that will have the authority to approve the site plan and building plans of an individual lot owner. As stated in the "Residential Design and Maintenance Rules and Regulations" that are part of Appendix J of the DEIS, one of their purposes is "to promote respect and sensitivity for the natural environment" (Article 1, Section 1, Page 1). Among the many rules is a limitation on the size of lawns to 2000 square feet (Article 3, Landscaping, Specific Guidelines, p. 32). It and similar rules are designed to make the proposed improvements on individual lots as compact and as respectful of the environment as possible, while allowing flexibility in design and placement of the improvements on the lot. The limit of disturbance on the plan is intended to demonstrate a realistic limit of disturbance within each lot, but it is not intended to represent the precise limit of disturbance that may result when the lot is improved. It is noted that the penalties for violation of the HOA rules are significant.

As with any house in Philipstown that would have a footprint of 3,000 square feet or greater will be subject to site plan approval by the Philipstown Planning Board. The penalties for violation of a Site Plan approved by the Planning Board are significant.

As each individual single family house site is developed, the contractor or contractors will be required to sign a Contractors Acknowledgement form for the SWPPP. The limits of disturbance for each lot will be delineated with orange construction fencing. It is anticipated that the general contractor for the site who is building the roads and infrastructure will be the Contractor of record for the SWPPP and will be responsible to ensure the site is compliant with the SWPPP. This includes the individual home sites. The project will also require weekly inspection by a qualified inspector, who also will monitor the area of disturbance to ensure that the SWPPP and plans are being followed.

In addition to the Town's requirement regarding site plan approval, every lot in the Hudson Highlands Reserve will be required to obtain site plan approval from the Architectural Review Board of the Homeowners Association regardless of the size of the home being constructed. This approval subjects the individual lot owner to inspections by the ARB, essentially inspection by his or her neighbors, until 60 days after the home is completed (See General Rules and Regulations, Section 2, paragraph (o)). Anticipated limits of disturbance are routinely shown on site plans and thus are subject to inspection by the ARB. As stated above, violation of the rules carry significant penalties.

Regardless of whether the Town requires site plan approval or not, the Building Inspector has the right to, and does make inspections of buildings and sites for compliance with the Zoning Law. As a result, individual lots in the Hudson Highlands Reserve will be subject to a second layer or double the normal level of scrutiny during the construction than that of most homes in Philipstown, thus providing significant oversight, not only as the infrastructure is being built, but also as individual homes are being built.

The applicant is also prepared to hire a 3rd party surveyor to confirm individual lot limits are complied with. An official report from said surveyor will be submitted to the HOA for record.

**Comment 2.94 (AKRF):** The FEIS should include a general summary of the Applicant's anticipated phasing and duration of construction for all components of the proposed project, while making references to the preliminary SWPPP included as Appendix M. It is also unclear from the text if the equestrian center would be constructed before or after the homes.

**Response 2.94:** Please see response to comment 2.92 for construction sequence. It is anticipated that it will take one construction season to complete the common elements of the site including the roadways, sewage collection system and common septic treatment system, post construction stormwater elements, the model home, etc. It may take several years to construct all of the home sites, which is dependent on the demand in the housing market and the number of contractors that will be constructing homes. As noted in Response 2.92, the equestrian center has been eliminated from the project.

**Comment 2.95 (AKRF):** The FEIS should also clearly describe the Applicant's plan for marketing and developing the residential component of the subdivision over time. Would the applicant serve as the master designer and builder for all prospective buyers, or would buyers be permitted to retain their own architect/contractor to design and build a house pursuant to prescribed design guidelines established by the Applicant/HOA?

**Response 2.95:** The Project Sponsor does not currently have a marketing plan in place but has had preliminary conversations with a marketing consultant to begin strategizing once Town approvals are in place.

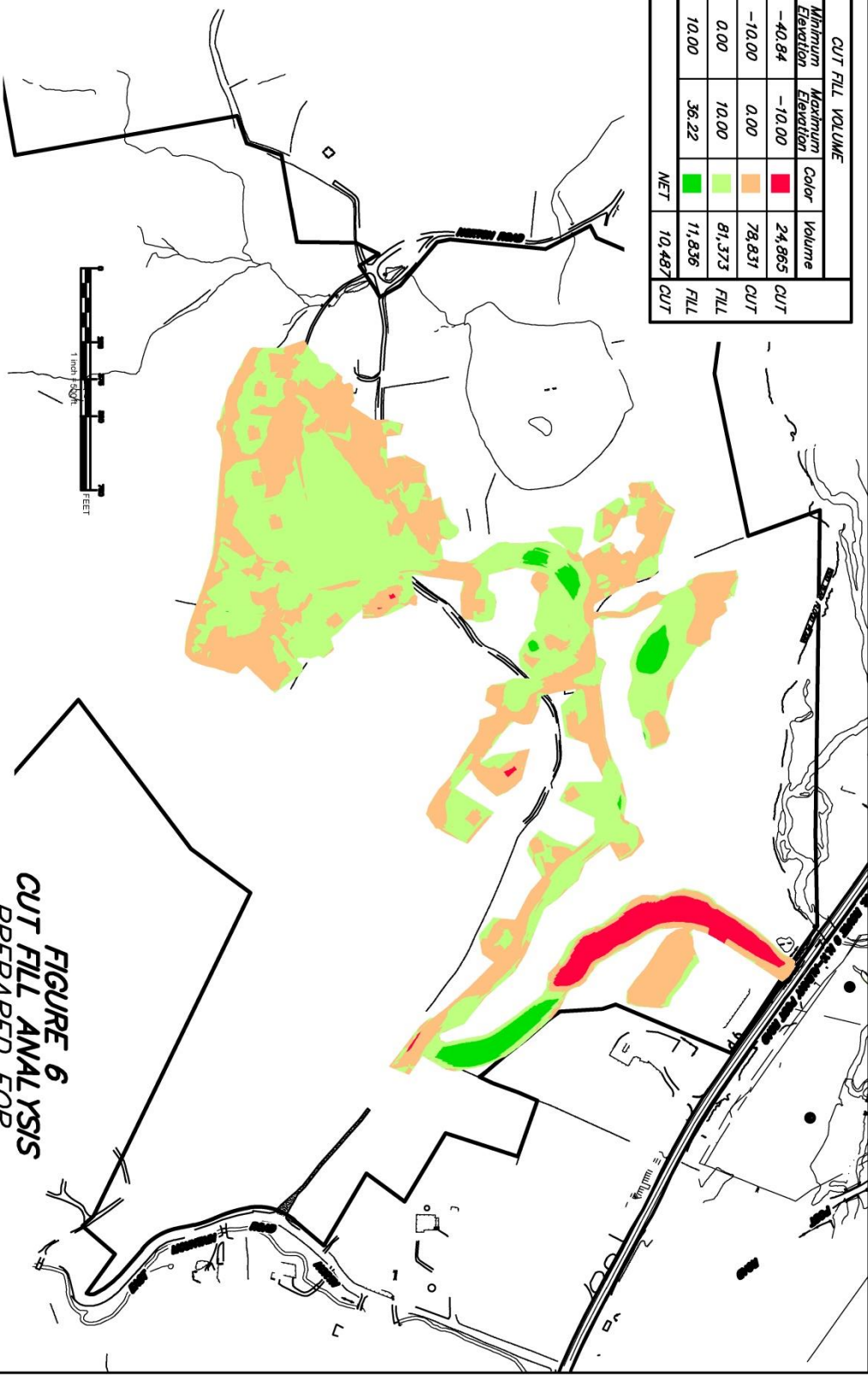
Based on the HOA documentation, Fractal Group, LLC, will serve as the master designer and builder for all prospective buyers. However, homeowners are permitted to modify their dwellings. All modifications are subject to approval by the HOA and the Town's building department.

**Comment 2.96 (AKRF):** The Applicant should perform a cut and fill analysis on the latest version of the development program and include it in the FEIS.

**Response 2.96:** Approximately 80% of the area to be disturbed will involve cuts and fills within 10 feet of the existing grade, and more than 60% is within 5 feet of existing grade. The layout of the roads and house sites avoid the steepest slopes with the exception of the main entrance road, Highland Trail. Figure 6 (on the following page) shows four (4) levels of shading that represent the depth of cut or fill.

- RED indicates cut in excess of 10 feet in depth, this is generally limited to Highland Trail from Route 9 to approximately station 9+66.
- ORANGE indicates cut between 0 and 10 feet in depth.
- DARK GREEN indicates fill in excess of 10 feet in depth, there are several locations, the main entrance road, the intersection of Highland Trail and Ulmar Pond Drive and the proposed septic field reserve area.
- LIGHT GREEN indicated fill between 0 and 10 feet in depth.

CUT FILL VOLUME					
Number	Minimum Elevation	Maximum Elevation	Color	Volume	
1	-40.84	-10.00	Red	24,965	CUT
2	-10.00	0.00	Orange	78,831	CUT
3	0.00	10.00	Light Green	81,373	FILL
4	10.00	36.22	Dark Green	11,836	FILL
NET				10,487	CUT



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**FIGURE 6**  
**CUT FILL ANALYSIS**  
PREPARED FOR  
**HUDSON HIGHLANDS RESERVE**  
SITUATE IN THE  
**TOWN OF PHILIPSTOWN**  
**PUTNAM COUNTY**  
**NEW YORK**  
March 3, 2022  
**BADEY & WATSON**  
**SURVEYING & ENGINEERING, P.C.**

The gross unadjusted cut for the project is 103,696 cubic yards.  
The gross unadjusted fill for the project is 93,209 cubic yards.  
The project anticipated an overall unadjusted net cut of 10,487 cubic yards.

## **C.2. Maintenance**

**Comment 2.97 (Gainer):** It is noted that all property owners will be proportionally responsible for the expenses involved in the maintenance of all common facilities, sanitary sewer system components and the equestrian center. However, not all property owners may board horses at the facility. What accommodation, if any, will be made for such owners?

**Response 2.97:** The Equestrian Center has been removed as an element of the proposed project.

**Comment 2.98 (Conner):** How will the roads be maintained? What surfacing materials will be used?

**Response 2.98:** All of the roadways in the Hudson Highlands Reserve Subdivision will be privately owned rights-of-way. They will not be maintained by the Town.

The responsibility for maintenance of each roadway shall be the Project Sponsor's until eighty percent (80%) of all lots are sold. Once maintenance and operation have been turned over to the HOA, it will be responsible for the maintenance of all roads.

Main roads will be asphalt, compliant with NYS DOT specifications. Driveways/Parking Pads are required to be a permeable, locally sourced, natural material like pavers.

**Comment 2.99 (Conner):** Will there be storage facilities for salt/ grit/ sand etc.? If so, how will stored salt/ treated grit etc. be prevented from contaminating groundwater?

**Response 2.99:** There will not be any storage facilities for salt/grit/sand etc. The elimination of the equestrian center has eliminated the need for full-time maintenance staff. As a result, seasonal maintenance of the road system in the Hudson Highlands Reserve will be outsourced and any sand/grit/salt will be carried in by the plowing contractor.

## **D. Permits and Approval**

**Comment 2.100 (AKRF):** The FEIS should specify whether or not blasting is envisioned as part of construction, particularly for the entrance road construction on steep rocky slopes. If blasting will be necessary, compliance with all requirements of the Town Code should be summarized in relation to the proposed project's activities.

**Response 2.100:** Based on soil boring results that can be found in Appendix I of the Preliminary Stormwater Pollution Prevention Plan, which is Appendix M of the DEIS, the areas of cut will not require blasting. Still, it cannot be said definitively that blasting will not be required. Should bedrock be encountered, there are at least two options that would be

considered before removal by blasting is necessary. First, a small relocation of the affected road or building would be evaluated. That move might be horizontal or vertical or both. Second, the excavator would try to remove the rock mechanically, through traditional excavation methods. It would only be after it is determined that neither of those two options can be employed that blasting would be required. If blasting is required, it would only be conducted by persons trained and licensed to do so. In doing so, a blaster would employ standard practices to assure that the blasting is conducted safely and with a minimum of annoyance to nearby residents. Safety measures include such things as limiting the size of the charge to the minimum necessary to accomplish the task, using blasting mats to contain the blasted rock, and protocols that assure that nearby personnel are safely away from the blast site before detonation. Blasting activities will be limited to those days of the week and times of the day when they will minimize annoyance to nearby residents.

**Comment 2.101 (AKRF):** The applicability of the Town of Philipstown Code's 175-36 — Steep terrain and ridgeline protection regulations, is not provided/calculated in the DEIS. This analysis is necessary to make an informed decision about the location of the overall development program with respect to steep slopes.

**Response 2.101:** Philipstown Code Section 175-36 – Steep Terrain and Ridge Line Protection limits development on land with slopes greater than 20% and further restricts development on lands with slopes greater than 35%. Most of the latest Hudson Highlands Reserve Plan respects the limitations imposed by the Town Code. Proposed houses are located on unconstrained land. Driveways and most of the proposed roads are located on unconstrained land or on land where the slopes are less than 35 percent. Still, there are areas on the access road from Route 9 that cross slopes that exceed 35 percent.

Access to the property from Horton Road or East Mountain Road North was not pursued because of the potential impact on the neighboring properties along those roads, especially from horse trailers and trucks supporting the Equestrian Center, which the Planning Board became aware of during its earliest site visit. In addition, the access from Horton Road would impact a wetland and stream buffer, and the access from East Mountain Road would be within the buffer of a stream on the north side of the road.

As explained by Mr. Gainer in his Comment 2.85, above, “From early on in the Board's review process, recognizing the poor geometry, limited width, and other related factors concerning the existing Town roadways bordering the site, as well as the expected traffic to be generated within the project and especially considering the transportation impacts of the equestrian center proposed, the Planning Board determined that the project's access should only be obtained from NYS Route 9. More recently, the Town of Philipstown Highway Superintendent has expressed similar concerns and does not support “any routine use of either Horton Road or East Mountain Road North for access to the proposed development.” The elimination of the equestrian center lessens these impacts, but it does not eliminate them.

The Planning Board has two options with regard to the anticipated disturbance of the slopes greater than 35% that will occur along the access road from Route 9. They are: (1) finding that “the proposed development would involve less land disturbance and have less overall impact on soils, vegetation, scenic views, and water resources than would development in compliance with

Subsection B(1) of this section” and granting the Special Use Permit provided for in Section 175-36B(7); or (2) requiring the Project Sponsor to obtain an area variance.

Hudson Highlands Reserve contains a protected ridge line. It is located in the extreme southeasterly portion of the property. It is well above (more than 300 feet vertically) and away from any site disturbance that will result from building the project. For this reason, no impact associated with the ridge line is anticipated.

### III. EXISTING CONDITIONS, ANTICIPATED IMPACTS AND MITIGATION

#### A. WATER RESOURCES

##### A.1. Stormwater

**Comment 3A.1 (Gainer):** Stormwater Design Concerns - General - The design information contained within Appendix M is far too preliminary to permit a detailed evaluation of the stormwater design or compliance with SWPPP requirements. Initially, in order to allow for any analysis of stormwater design facilities and related disturbance issues, the conceptual design information should be added to the "Preliminary Utility Plan" (once the project's constraint mapping is overlaid) so that their general sizing, function and practicality can be established.

**Response 3A.1:** The Preliminary SWPPP (Appendix H) and the Preliminary Utility Plan have been updated to contain a more detailed analysis of the post stormwater condition of the project. They now include sizing of the proposed stormwater practices, including grading, and a more detailed construction sequence.

**Comment 3A.2 (Gainer):** Stormwater Controls along project roadways - the conceptual drainage design suggests the use of dry swales with check dams along all project roadways. While this is an appropriate stormwater conveyance for lesser sloped areas, both the "entry road" and "main road" contain areas of significant grades where this would not be appropriate. Formal drainage facilities will be required in such areas. In other areas, turf- or soil-reinforcement techniques will be necessary to prevent erosive conditions. These should all be noted, so that as the project advances necessary E/C measures are followed.

**Response 3A.2:** The Preliminary SWPPP (Appendix H) and the Preliminary Utility Plan have been updated. They now contain a more detailed analysis of the post stormwater condition of the project, including sizing of the proposed stormwater practices, grading and a more detailed construction sequence. Roadside swales have been replaced with catch basins and pipes where steep grades make this approach more appropriate. The Erosion and Sediment Control Plan has also been updated to provide appropriate control during and after completion of construction.

**Comment 3A.3 (Gainer):** Stormwater controls within individual lots or common areas - It is noted that each lot is proposed to contain individual rain gardens as mitigation. It should be explained what controls and enforcement mechanisms will be established on any such required improvements to assure their long-term viability and function. Beyond these techniques, various water quality treatment measures will serve multiple residences, which will further tax the ability to control and manage these facilities.

**Response 3A.3:** Part of the Stormwater Pollution Prevention Plan (Appendix H) includes the installation of rain gardens. While they will not be installed as part of the basic infrastructure, they are still integral to the plan. Individual rain gardens will be installed when the home on the same lot is constructed. Installation will be approved and monitored by the HOA. To assure proper maintenance of the rain gardens, they will be maintained by the HOA in cooperation with the individual lot owners. Authority for the HOA to maintain the rain gardens on the residential lots can be found in Appendix I of the DEIS, Article IV, Section 3(q), page 11.

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**Comment 3A.4 (Gainer):** Calculation of impervious areas - It is noted that all outdoor paddock areas will include an impermeable barrier to address potential pollution concerns of the horses to be housed on the property. It is uncertain whether this, as well as the management and treatment of run-off from such areas, is addressed by the conceptual stormwater design incorporated into the DEIS. Additionally, the treatment of run-off from such equestrian areas from a water quality standpoint must be incorporated into the design plans.

**Response 3A.4:** The Equestrian Center has been removed as an element of the proposed project.

**Comment 3A.5 (Conner):** What will the total impervious surface coverage be once the access road is constructed for the HC lot on Route 9 that contains the office building, since that lot will remain a separate lot?

**Response 3A.5:** As shown in the following table, when the commercial lot is reconfigured to allow for the access road into Hudson Highlands Reserve, the proportion of impervious coverage will increase from 22.5% to 28.7%, in part because more impervious surfaces are being added to the lot in the form of pavement for the haul road, but also because the size of the lot will shrink and the amount of existing impervious surfaces will make up a greater percentage of lot coverage. The Philipstown Zoning Law allows land within the Highway Commercial Zone (HC) to have up to 60% impervious coverage.

Table 9: Route 9 Commercial Lot Coverage Analysis				
	As presently configured		As proposed	
	Square feet	Percent	Square feet	Percent
Commercial Lot	195,988	100%	168,028	100%
Pavement	29,615		33,732	
Building	11,774		11,774	
Walks	2,711		2,711	
Total Impervious	44,100	22.5%	48,217	28.7%
Total Pervious	151,888	77.4%	123,928	71.3%

**Comment 3A.6 (HHLT):** Impact of Impervious Surface: The DEIS states that 11.1 acres of the property consists of impervious surface (DEIS Page 51). However, the size of the equestrian facility alone is 11 acres and from the description of it, most of it appears to consist of a substrate approximating impervious surface in order to manage horse waste. Therefore it is hard to understand how only 3.5 acres of impervious surface are assigned to the equestrian facility.

More detail needs to be provided as to what is treated as impervious versus permeable in the equestrian facility.

**Response 3A.6:** The Equestrian Center has been removed as an element of the proposed project.

**Comment 3A.7 (HHLT):** Additionally, the equestrian facility's significant increase in impervious surface and forest clearing near the pond and uphill from Clove Creek, as well as potential changes in water flow due to increased water withdrawal for water supply and cleaning for 40 horses, may change surface water quality in terms of sedimentation, flow rate, and temperature. Clove Creek and the stream tributary that connects Ulmar Pond to it are considered "valuable and sensitive fisheries resources" according to NYS DEC. The impact of the commercial equestrian facility to native brook trout populations is not addressed.

**Response 3A.7:** The Equestrian Center has been removed as an element of the proposed project.

**Comment 3A.8 (Benjamin):** It's also interesting that the state of New Jersey considers such large commercial equine centers to be concentrated animal feeding operation, CAFOs. You might know, if you know anything about pigs and chickens, which are tightly regulated by the state in the hopes of preventing NPK nutrient pollution, as well as vermin and pathogen introduction into adjacent aquifers, wetlands, ponds, and/or streams.

**Response 3A.8:** The Equestrian Center has been removed as an element of the proposed project.

**Comment 3A.9 (Conservation Board):** A significant part of the DEIS relates to the Equestrian Center, primarily because the 40 horses that will be stabled there will produce approximately one million pounds per year of environmentally damaging horse waste, all of which must be contained and then trucked off-site weekly for disposal. Although not described in the DEIS, production of the one million pounds of horse waste that must be removed every year will presumably require the annual trucking into the Equestrian Center of an equivalent one million pounds of feed and straw bedding. Any failure to contain and remove the horse waste properly would risk dangerously contaminating Water Resources. In addition, riding horses on the approximately 160 acres of Conserved Land, which the DEIS says will not occur, would rapidly destroy Vegetation and Wildlife.

**Response 3A.9:** The Equestrian Center has been removed as an element of the proposed project.

## **A.2. Ulmar Pond and Clove Creek**

**Comment 3A.10 (AKRF):** As indicated in correspondence between the Applicant and their consultants cited within the DEIS, runoff and septic discharge from development of residential and equestrian uses and land clearing raise likelihood of increased (not decreased) discharge of nutrient pollutants which could worsen eutrophic conditions in Ulmar Pond. Pond management to avoid/minimize such impacts is proposed. The Solitude letter (2.15.18) indicates that since the 2015 pond water quality sampling was a one-time sampling event, a water quality monitoring program should be initiated to begin generating a robust baseline of data to use for the effective management of the system. No subsequent water sampling of Ulmar Pond is provided in the DEIS to support the contention that the pond is frequently eutrophic for management purposes. Despite the pond's one-time phytoplankton bloom, fish sampling showed fish condition/health and species assemblage was high value for angling and aquatic

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plant sampling showed good conditions, with only trace density of filamentous algae and invasive curly-leaf pond weed. Similarly, the Clove Creek macroinvertebrate sampling showed an even mix of species indicative of a generally healthy system. Protection of the pond and creek with proper site design are of utmost importance. Consideration should be given to further minimizing proposed development around Ulmar Pond to the maximum extent practicable. The incorporated letter from Allied Biological (6.29.15) says, "It's likely that if the land around the pond is developed, the impairment could intensify, which could lead to the collapse of one or more of the biological communities." We agree. Additional use of and development around the pond present the possibility that the pond will be degraded, unless clear restrictions are placed on pond use, on the density and distance of development, and on the mitigation measures (new vegetated buffers, etc.) proposed to protect it.

**Response 3A.10:** The statement quoted from the 2015 Allied Biological letter was made in reference to an undetermined hypothetical development around Ulmar Pond, assuming individual onsite sanitary disposal systems and no mitigation. At that point, the proposed plan had yet to be developed, and no mitigation was proposed. The 2019 letter from Solitude (the new name for Allied Biological), written by the same person, provided an assessment for the specific layout proposed in the plan submitted, with the proposed Best Management Practices (BMPs) incorporated. This assessment concluded:

*"The current development plan includes several BMPs, such as a conservation easement from the edge of the pond to the closest property, a sewer system for all residences, and a proposed horse manure management system for the planned Equestrian Center on the site. The plan, as reviewed, addresses all of these potential nutrient loading sources. In several cases, these BMPs are exceeded by the sponsor. In addition, following development, the sponsor plans to engage with the Home Owners' Association (HOA) to actively manage the pond via a professional lake management firm. All of these actions are steps to protect the natural resource that is Ulmar Pond."*

The letter goes on to provide more detail on the measures proposed:

*"The proposed conservation easement will include a minimum 140 foot forested buffer from the pond edge to a constructed wall. This is 40 feet wider than statutory required 100 feet...This forested buffer will remain untouched during development of the land. According to the Massachusetts Buffer Manual (provided to the sponsor), a minimum 125 foot wide vegetative buffer is suitable for the interception of nutrients via run-off. This buffer will also provide pond bank stabilization and suitable wildlife habitat, and possibly a degree of sediment control. It is recommended that this forested buffer be maintained by the HOA following development. Despite the increased slopes of the surrounding land, the majority of the soils (Charlton) are well drained, and combined with the existing tree cover and minimal impervious surfaces (via homeowner development restrictions), runoff to the pond will be reduced. Imposing Covenants and Restrictions on all lots will restrict the use of fertilizers on manicured lawns. This easement and the restrictions on fertilizer will be suitable to minimize the impacts of run-off into the pond.*

*There will be no septic systems immediately around the pond. The proposed plan includes a central sewer system, with a requirement that all houses be connected to this system. Therefore, septic system leaching from houses will not be a source of nutrient loading to the pond.*

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Since this assessment was made, the proposed plans have been changed yet again to further reduce potential impacts to Ulmar Pond. Both the proposed Equestrian Center and the dry hydrant that would have drawn water from the Ulmar Pond have been eliminated.

While no further sampling was yet performed, the observed eutrophic conditions at the time of sampling were presumed, making Ulmar Pond a more potentially sensitive resource than an otherwise healthy pond. In assuming worst case conditions, no further testing is necessary for planning purposes. The proposed BMPs were developed to not only protect the pond, but to improve conditions. It is anticipated that the HOA will contract a professional lake management firm that will conduct baseline testing before a management strategy is developed.

As a condition of approval, the Property owner/HOA shall engage a firm professionally staffed by registered pesticide applicators that have New York State Department of Environmental Conservation Pesticide Permits and are trained to administer pesticide applications in aquatic environs. A management program that shall maintain water quality of Ulmar Pond by implementing the Best Management Practices will be developed in consultation with the New York State Department of Environmental Conservation and the Putnam County Soil and Water Conservation District.

**Comment 3A.11 (Conservation Board):** Risks to Water Resources; With respect to Water Resources, HHR poses serious risks to both groundwater and surface water contained within the area encompassed by HHR, as well as to surrounding groundwater, the watershed for Clove Creek, and the Hudson River itself. The risk results primarily, but not exclusively, from the fact that the Equestrian Center will generate approximately one million pounds of horse waste per year (DEIS, Appendix "N": September 21, 2017 report of B. Laing, Environmental Consultant for HHR; 65 lbs of estimated stall waste per horse per day x 40 horses x 365 days = 949,000 lbs./year).

Runoff from all of such waste, including feces, urine, and soiled stall bedding material, must be prevented from leaching into the soil or being washed into streams. While HHR contemplates adoption of an extensive Manure Management Program, that program must be fully funded from operations of the Equestrian Center; executed perfectly, first by employees of the Equestrian Center, and then by a hired contractor; and rigorously followed, in perpetuity, in order to avoid substantial contamination of both groundwater and surface water.

AS A RESULT OF THE ISSUES DESCRIBED ABOVE, THE PHILIPSTOWN CONSERVATION BOARD BELIEVES THAT THE RISK POSED BY HHR TO WATER RESOURCES, INCLUDING ULMAR POND, CLOVE CREEK, AND THE HUDSON RIVER, IS VERY HIGH.

**Response 3A.11:** The Equestrian Center has been removed as an element of the proposed project.

**Comment 3A.12 (Conservation Board):** "Trust but Verify": Testing & Inspection for Water Resources... an independent, certified water-testing firm selected by the Town of Philipstown should test Ulmar Pond, representative vernal ponds, Clove Creek, and any other sites selected by it or the Town of Philipstown, at the expense of HHR, and deliver reports simultaneously to HHR and the Town of Philipstown. Such testing should be done monthly. At the option of the

Town of Philipstown, such testing may also be required after any rainstorm producing more than one inch of rain in six hours or less.

**Response 3A.12:** It is unclear the time period during which this testing is being suggested. No vernal pools have been found to exist on the project site. Ulmar Pond and Clove Creek will be monitored while construction is in progress nearby to ensure that erosion and sedimentation controls are effective. Monitoring for the continued management of Ulmar Pond will be required.

**Comment 3A.13 (Conservation Board):** Baseline Testing: in order to provide baseline data,... comprehensive water testing...should be undertaken within 30 days of any approval of HHR by the Planning Board and should be done monthly thereafter, in order to provide a meaningful pre-development record of water quality... Absent such baselines, it will not be possible to fully evaluate the implications of later testing and inspection.

**Response 3A.13:** See Response 3A.12. The Applicant/Project Sponsor agrees that baseline conditions for Ulmar Pond and Clove Creek should be established prior to construction, and both resources would be routinely monitored/inspected by the Town while construction is in progress nearby to ensure that erosion and sedimentation controls are effective. Following construction of the project, the HOA would retain a professional pond management firm to conduct baseline testing of Ulmar Pond before a pond management strategy is developed and implemented for the operational life of the project. Should the project be approved, as construction may not begin for many months following such approval, the request of the commenter for establishing baseline conditions at Ulmar Pond within 30 days of approval would not be necessary.

**Comment 3A.14 (HHLT):** Incomplete Study of Pond and Creek: In summarizing the report from Allied Biological, in Appendix C of the DEIS, commentary on Page 144 of the Conservation Analysis says *“Water quality monitoring was conducted on one date in late June for this baseline study (June 29 [2015]). We understand that this is not ideal, but the project timeline restricted us to one sampling date. A much more complete picture of the fluctuating water quality would have been obtained if sampling occurred throughout the entire growing season (typically considered May through September in the northeast). Future water quality monitoring efforts in this basin should strongly consider full season sampling efforts, of at least three sampling dates.”* Despite this recommendation from four years ago (i.e. in 2015), and the Planning Board’s requirement for a full environmental review including water impacts in June 2018, the DEIS does not include the water quality study recommended by Allied Biological.

**Response 3A.14:** See Response 3A.12. For planning purposes, the most sensitive conditions for Ulmar Pond, which were those observed at the time of sampling, were presumed. It is fully recognized that this single test is not adequate for management purposes, or for assessing potential impacts during construction. Additional monitoring will be conducted for those purposes at the times required.

**Comment 3A.15 (HHLT):** Severe Impact of Proximity to Water: The DEIS relies heavily on the Lathrop paper in Appendix P to justify the siting of the 25 houses spread out across the property from North to South. However, that analysis ignores another key criterion for conservation development used in the Lathrop paper, which is proximity to water resources. Here the Lathrop paper suggests that anything within 300 feet of surface waters will have a severe adverse

environmental impact (Lathrop Paper DEIS Appendix P Page 33, Fig. 2 B). This would apply to the houses around the pond.

**Response 3A.15:** As noted later in response 3B.54, though the Lathrop 1998 paper provided one basis of the DEIS analysis, more recent information and current technology has also been used in the analysis.

The Project Sponsor and the commenter have differing opinions on what page 33/Figure 2B of the referenced 1998 Lathrop paper concludes regarding buffers from surface waters. Specifically, the Project Sponsor does not agree with the statement that *“the Lathrop paper suggests that anything within 300 feet of surface waters will have a severe adverse environmental impact.”* According to the Project Sponsor, the referenced Figure 2B illustrates that the **potential** for non-point source pollution is severe with buffers ranging from 50 to 150 meters, but the Lathrop paper continues by saying *“However, the translation of this general principle into an appropriate buffer weighting scheme (e.g., the expected impact of development with specific buffer distance) is highly problematic (Muscutt et al., 1993; Zampella et al., 1994). Further, depending on their design and implementation, storm water management systems can either enhance the role of riparian buffers or greatly negate their effectiveness by short-circuiting the natural flow of storm runoff. The site-specific field studies coupled with appropriate hydrological modeling needed to more conclusively define appropriate buffer zones was beyond the scope of this study.”* Thus, guidance was considered specifically for the geographic area in which HHR resides.

The measures being proposed by the Project Sponsor are intended to enhance the effectiveness of the proposed buffer. The Project Sponsor believes these practices will mitigate adverse effects to the maximum extent practicable. HHR utilizes green construction, LEED Platinum certification and aims for zero-net energy use. The following Low Impact Development (LID) stormwater management concepts are proposed during construction:

- Riparian buffers
- Soil restoration
- Velocity dissipaters
- Dry swales

Current guidelines specific to HHR’s geographic location stipulate that all development must be at least 100 feet from open water sources. As depicted on the project plans, the closest proposed home to Ulmar Pond is 171 feet from its edge – about 71 feet beyond the regulated distance. All other development will be well in excess of 200 feet from any open water. In addition, these proposed residences will send their septic waste to a common sanitary disposal field more than 400 feet from the pond. Thus, HHR is more than complying with area-specific current guidance. With the stormwater management measures proposed, proposed HOA restrictions on the use of fertilizers and pesticides, other design features that direct both stormwater and wastewater away from Ulmar Pond, and the preservation of a naturally vegetated 140-foot buffer, the potential for non-point source pollution would likely be reduced to “slight”. Please also see Response to 3B.47.

**Comment 3A.16 (HHLT):** Require ongoing testing in Ulmar Pond and Clove Creek before, during and after construction, and on an ongoing basis, as a condition of site plan approval.

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Require that the Town oversee the testing, paid for by the applicant or the Homeowners Association (HOA), and that construction and/or use of the equestrian facility be halted pending remediation, should water quality deteriorate. Require monthly testing of the pond and creek during construction. Mandate quarterly testing after construction. Require a performance bond or letter of credit for water testing costs be posted by the applicant, to be drawn upon in case of default by the HOA. Require similar testing and mitigation steps for the Clove Creek Aquifer, and especially monitoring of the common sewerage treatment system under the horse turnout paddock and the impact it has on the aquifer.

**Response 3A.16:** The Equestrian Center has been removed as an element of the proposed project. See Responses 3A.12 and 3A.13.

**Comment 3A.17 (Audubon):** Constructing an equestrian center with 40 horses on the property will likely mean eutrophication of the pond and a lowering of the dissolved oxygen available for fish. Clove Creek and its tributaries will also suffer from the degradation of water quality.

**Response 3A.17:** The Equestrian Center has been removed as an element of the proposed project.

**Comment 3A.18 (O'Garden):** I'm also concerned about -- according to the page 38, 39,... of the environmental impact statement, "The critical maintenance of the pond, stormwater management, wastewater is going to be the responsibility of a homeowners' association." So I looked this up. What is a homeowners' association? What is this actually like, a nonprofit organization. People get elected to the boards. It's generally a volunteer thing. And I'm sure that people who live in New York City and have a second home might want to get really involved in the homeowners' association. They might just want to hire a management company which plenty of people do.

**Response 3A.18:** As per Cooperative Policy Statement (CPS-7 issued by the Department of Law of the State of New York, a "*Homeowners Association*" ('HOA') includes, but is not limited to, developments consisting of individual homes or lots deeded in fee simple for which a Declaration of Covenants, Restrictions, Easements, and Liens or equivalent documents or restrictions contained in individual deeds or any other mechanism or covenant or local law or ordinance requires that homeowners or lot owners contribute cooperatively to the ownership and/or maintenance of property used in common...." As noted above, the HOA is to be incorporated under the Not-for-Profit Corporation Law of the State of New York, and the Board members, who have fiduciary obligations, must comply with all HOA governing documents, Town laws, and the Conservation Easement. Although it is permissible to hire a professional management company, the Board members are always subject to their fiduciary obligations, and are bound to uphold the foregoing governing documents, laws, and Conservation Easement, etc.

### A.3. Groundwater

**Comment 3A.19 (HHLT):** Chazen Study on Priority Parcels for Clove Creek Aquifer: In October 2018, The Chazen Companies performed an analysis for HHLT on land parcels that have the highest impact on the flow of water into the Clove Creek Aquifer. Based on soils,

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slopes, land cover and amount of land directly over the Clove Creek Aquifer (CCA), the Hudson Highlands Reserve parcels are some of the most valuable for ensuring the sustainability of the CCA on both a per acre and total acreage basis. The Planning Board should carefully consider the impact on the Clove Creek Aquifer of this development, given the parcels' importance to the Aquifer. Maps and methodology from The Chazen study are attached as Exhibit D.

**Response 3A.19:** The original proposed layout anticipated 45.7 acres of disturbance with 164.4 acres undisturbed or more than 78% of the site. Since removing the equestrian center from the proposed project and making other plan changes, the length of the roadway has been reduced by approximately 900 linear feet and the overall increase in impervious area has been reduced by approximately 3.4 acres. The limits of disturbance have also decreased by 7.7 acres, thereby leaving about 81.9% of the 210.1 acre site undisturbed.

The Project Sponsor's engineers have had several conversations with Russell Urban-Mead, the Director of Environmental Services, from the Chazen Companies, regarding the potential impact the development of the parcels, including the installation of the common septic, 22 wells and the stormwater mitigation practices might have on the Clove Creek Aquifer. Mr. Urban-Mead pointed out that the development, including the stormwater, well and septic elements are being designed and constructed in accordance with all relevant Federal, State and Local codes, rules and regulations. The codes, rules and regulations are intended to allow for reasonable development of land while safeguarding the environment.

Water – Calculations that show the withdrawal of the 17,700 GPD demand is a small portion of the 179,641 GPD recharge rate.

Wastewater – Badey & Watson will design the common septic system in accordance with State and Local codes, rules and guidelines. The system will require not only approval by the Putnam County Department of Health, but will require a SPDES permit and review and approval by the New York State Department of Environmental Conservation.

Stormwater – Badey & Watson has developed a Preliminary Stormwater Pollution Prevention Plan (SWPPP) for the project. It provides overall calculations of the potential increase in stormwater runoff from the change in cover characteristics and possible decrease in times of concentration and calculates the Water Quality Volume (WQv) and Runoff Reduction Volume (RRv). Post construction stormwater practices are proposed in accordance with the latest version of the NYSDEC General Permit for Construction Activity that will address treatment of the Water Quality Volume (WQv), Runoff Reduction Volume (RRv) and any increase in runoff between the pre- and post- 1-, 10- and 100-year storm events. Badey & Watson will size the proposed stormwater treatment practices, rain gardens and bioretention areas in accordance with the latest New York State Stormwater Design Manual to recharge collected stormwater on site to mimic existing conditions. This will, among other things, ensure that the recharge rate of rainwater runoff on the site won't decrease after development.

**Comment 3A.20 (Hammond):** Proposed water usage is unclear and may be misleading. Developer proposes adding 26 wells, claiming an average use of 24,000 GPD will not affect watershed and provides annual watershed data. However, providing annual averages does not illustrate how daily water usage will affect Clove Creek, especially in the summer.

Likewise claims about the annual groundwater recharge rate of 65,568,911 gallons per year (or 179,641 GPD) do not clarify the recharge rate and water usage effects on the aquifer in the



summer, when water supply is most critical and most in demand. The levels of our creeks and streams are already dropping in June. The water from my mother's well has changed significantly in the last 30 years.

**Response 3A.20:** The Equestrian Center has been removed as an element of the proposed action. Only 22 new wells are proposed, not 26. This is because wells exist for Lots 1 and 20 and for the historic barn that will be repurposed from its present use as an accessory residential structure to the community building identified on the plans. As a result, and as demonstrated in Table 2 that appears in Response 1.1 (repeated below), the expected water demand is now 17,700 gpd and includes a 15% safety factor. The actual increase that will result from the Hudson Highlands Reserve has been estimated to be 15,500 gallons including a 15% safety factor. The difference is due to the already existing demand for the three residential wells and that of the existing commercial building.

Table 2 (repeated from response 1.1)			
Change in Water Demand as a Result of Design Change			
Original Water Demand Estimate including 15% safety factor (gpd)			24,000
Source of Demand Reduction	Original Estimate (gpd)	Safety Factor (15%) (gpd)	
Equestrian Facility	4,675	701	(5,376)
Frisenda House	200	30	( 230)
Lot 25	600	90	( 690)
Revised Water Demand (gpd)			17,704
Revised Water Demand (gpd) Rounded			17,700

Table 3 (repeated from response 1.1)			
Original and Revised Demand as a Percent of Daily Recharge (gpd)			
	Demand	Daily Recharge	Demand as a Percent of Daily Recharge
Original Demand (gpd)	24,000	179,641	13.4%
Revised Demand (gpd)	17,700	179,641	9.8%

The use of groundwater was calculated using the standards required by the Putnam County Department of Health, the standard throughout Putnam County for new construction. Because of the use of water-saving plumbing devices, the Putnam County Department of Health has determined that the actual demand is 75 gallons per person per day.

According to the “*Town of Philipstown Groundwater Report and Planning Resource*” by The Chazen Companies, dated June 2007 (Chazen Report), the average groundwater use is between 80 and 100 gallons per person per day. This is consistent with the estimates the United States Geological Survey cited in Response 3A.22.

The 17,700 gallons per day will not completely evaporate. Most of it is returned to the groundwater through the absorption fields of the septic system. Accordingly, the net loss of

groundwater is considerably less than the 17,700 gpd anticipated daily demand resulting from the Hudson Highlands Reserve Project.

In Section 2.5 the Chazen Report indicates that of the 80-100 gallons per person per day, 20 gallons are consumed by the person as a result of “perspiration, cooking, watering plants, washing cars, and during drying by dishwashers and clothes driers.” Assuming that the 20 gallons estimated by Chazen is not reduced by water-saving devices, one can estimate that of the 17,700 gallons drawn from the groundwater by the Hudson Highlands Reserve Project, 12,980 gallons per person per day will be returned to the groundwater under the site.

$$\left(\frac{17,700}{75}\right) * 20 = 4,720 \text{ GPD consumed by person}$$

$$\left(\frac{17,700}{75}\right) * 55 = 12,980 \text{ GPD returned to Groundwater}$$

17,700 GPD drawn from groundwater

The Chazen Report states that during the winter virtually 100% of the groundwater returned to the earth through septic systems enters the groundwater. In summer that number drops to between 30 to 50%. This is due to loss from evaporation and root transpiration (p. 12). Assuming the upper limit of the estimate is lost, loss of groundwater anticipated when Hudson Highlands Reserve is built is as follows:

Table 10: Groundwater Loss (Winter v. Summer) Gallons per Day					
	Withdrawn	Consumed	Returned	Lost	Net Loss
Winter	17,700	4,720	12,980	0	4,720
Summer	17,700	4,720	6,490	6,490	11,210

As the table above shows, the greatest loss of groundwater does occur in the summer. However, as shown in the graphic (Figure 7) that follows, rainfall and thus the water available for recharge is greatest in the summer months. The graphic shows that the highest average monthly rainfall occurs in the 30 days surrounding September 30, followed closely by the 30 days surrounding July 26 and June 5, the hottest time of the year, when the earth’s surface can be dry and most ready to absorb the rain that falls onto it.

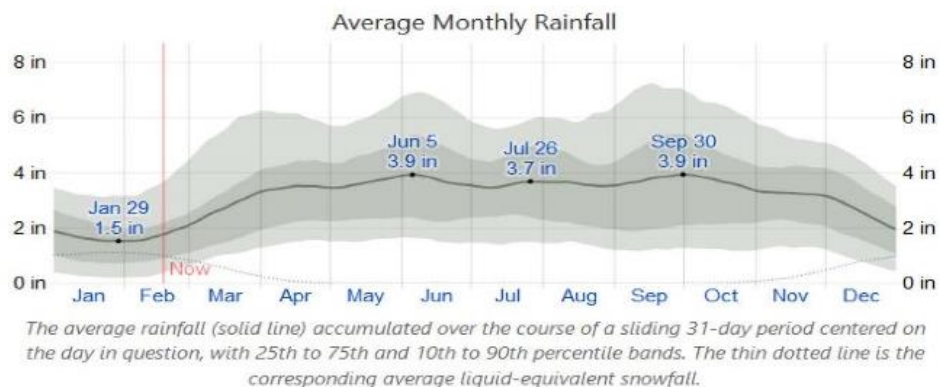
Data from Weather Spark downloaded from weatherspark.com on February 17, 2021

### Rainfall

To show variation within the months and not just the monthly totals, we show the rainfall accumulated over a sliding 31-day period centered around each day of the year. Cold Spring experiences significant seasonal variation in monthly rainfall.

Rain falls throughout the year in Cold Spring. The most rain falls during the 31 days centered around September 30, with an average total accumulation of 3.9 inches.

The least rain falls around January 29, with an average total accumulation of 1.5 inches.



**Figure 7: Average Monthly Rainfall**

Section 4.2 of The Chazen Report recommends minimum lot areas for lots serviced by septic systems ranging from 1.2 to 5.4 acres per individual system. The recommended lot size depends on the Hydrologic Soil Group of the property. More than 60%, 126 acres of the site, contains soils in Hydrologic Soil Group A and B (DEIS, Table 3, p. 62). These are the groups with the two smallest recommended lot sizes. Using Group B's larger minimum lot size 1.6 acres per system, one can estimate that Hudson Highlands Reserve could support a minimum of seventy-eight (78) individual single family septic systems. The project proposes an equivalent of twenty-six (26) systems, including the 24 homes, the community building and the commercial building. The actual total number will be the two individual existing systems for the Frisenda House and the commercial building, plus a common system to serve the remaining 23 homes and the community building.

*126 acres of soils in Groups A & B/1.6 acres per septic system for Group B = 76 potential systems*

When compared to a conventional subdivision with an equal number of lots, the conservation subdivision results in less impervious surface due to shorter and fewer roads and driveways, and less loss of tree cover, helping slow evaporation. It is also noted that the Residential Design and Rules and Regulations, found in Appendix J of the DEIS, specifically limits the introduction of impervious surfaces and limits the total size of lawn areas on residential lots to 2,000 square feet, far less than a typical suburban residential lot.

The Chazen report goes on to state that *"The density recommendations found here do not preclude use of cluster subdivision models as recommended in many municipal zoning ordinances and Comprehensive Plans. As long as overall site density objectives are met, and with proper site design and engineering practices, the model will continue to manage groundwater nitrate concentrations while allowing clustered construction techniques."* It is important to restate that the common septic system will be professionally managed and maintained, thus assuring that possible pollution of groundwater due to the failure of individual lot owners to maintain their systems will not occur.

The elimination of the Equestrian Center, the use of water-saving devices, the professional management of a common septic system, restrictions on the development of individual lots and the permanent preservation of more than 159 acres combine to reduce groundwater use to the greatest practical extent.

Accordingly, no significant adverse impact is expected to occur to water levels in either the aquifer or Clove Creek.

**Comment 3A.21 (Hammond):** Dated water information. As mentioned in HHLT letter dated 11/30/17, water data cited is 12 years old. Where is the new data?

**Response 3A.21:** There is no new data. The Chazen Companies completed a minor update of its report in 2018. The sum of the information was contained in two changes dealing with well depth and yield, but did not include a narrative. The Project Sponsor's designers inquired locally about the report with negative results. They then inquired directly to The Chazen Companies and were told *"There is no formal report update. There was some discussion of*

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some other deliverables, but they have not materialized.” (Email from Russel Urban-Mead of the Chazen Companies, August 31, 2020)

**Comment 3A.22 (Hammond):** Data on water usage is perplexing, as I believe it is significantly less than US averages. The US national average is 400 gallons per day, and this doesn't include filling pools, watering lawns or gardens. On what assumptions were water usage based?

**Response 3A.22:** Water use was estimated in accordance with Putnam County Department of Health regulations. These regulations require that septic systems be designed based on water usage of 150 gallons per day (GPD) per bedroom. The regulations presume that each bedroom will accommodate 2 people. Thus, a 4-bedroom house would use 600 gallons per day.

The United States Geological Survey (<https://www.usgs.gov/>) estimates that the average person uses 80 to 100 gallons per day, not 400 gallons per day. Putnam County allows a 25% reduction for the use of water saving devices such as low flow toilets and shower heads. Considering this reduction, the Putnam County requirement of 150 gallons per bedroom per day is both consistent and appropriate.

**Comment 3A.23 (Hammond):** This may be nitpicking, but developer claims that the average recharge rate is nearly 9 times the demand, but my math says that it is only roughly 7.5 times the demand. How was this calculated? I'm not qualified to judge if this is a sufficient recharge rate, but the difference between 7.5 and 9 is nearly 20%.

**Response 3A.23:** The commenter is correct. The factor 9 is incorrect. It should have been 7.5. However, the revised recharge rate is 10.1 times the revised groundwater demand. This is due, in large part (5,376 GPD) to the elimination of the Equestrian Center, and to a lesser extent (230 GPD) because of the reduction of the lot count to 24 and the use of the existing Frisenda house as one of the 24 lots in Hudson Highlands Reserve. More discussion can be found in Response 1.1. The corrected formula and the new formula are as follows:

<u>Corrected Formula</u>		<u>New Formula</u>	
Daily Recharge Rate	179,641 GPD	Daily Recharge Rate	179,641 GPD
----- = 7.5		----- = 10.1	
Original Daily Demand	24,000 GPD	Revised Demand	17,700 GPD

#### A.4. Floodplains and Wetlands

**Comment 3A.24 (AKRF):** Section B.1.a (p. 80) indicates that two (2) hillside seeps were found, "both on the slope east of the cleared area". One at the north end of the cleared area (Area D on Figure 26), and a larger one at the south end. These are fragile habitats that are an important resource for water dependent wildlife. Additionally, these seeps as described have hydrophytic vegetation (Juncus, Carex, Sphagnum, Symplocarpus foetidus, Impatiens capensis, etc.) and are connected via surface flow to onsite wetlands — why were these seeps not flagged as wetland themselves? The DEIS must clarify if any portion of these two hillside seeps is located within the proposed development footprint. Both seeps must be located accurately on

map/figure (at present they are not) and, as discussed above, they must be delineated/flagged as wetland if they meet the USACE 3-parameter approach. The development footprint must be adjusted to avoid these seeps and each should be provided with an appropriate buffer. This comment was conveyed during the DEIS completeness review and remains unaddressed.

**Response 3A.24:** In the Project Sponsor's opinion, the seeps are of extremely limited size, and are not connected to other onsite wetlands. As discussed in the DEIS, some of the discharge may combine with runoff that flows overland (through sheet flow, not a defined perennial or intermittent channel) to a stream corridor that feeds into a forested wetland near the east side of the pond. As also identified in the DEIS, neither the seeps nor the small isolated areas of hydrophytic vegetation are directly or hydrologically connected to any of the mapped wetlands or streams. While some of this discharge may eventually reach site wetlands and watercourses through sheet flow, the seeps have no defined nexus to these wetlands and watercourses. As such, they do not meet the criteria to be flagged as federal wetlands. The wetland delineation, which does not include the seeps, was reviewed and confirmed by the Town on June 13, 2017. As no federal wetlands would be disturbed under the proposed project, coordination with the Army Corps was not required.

Both seeps are located on steep slopes far outside any proposed development footprint.

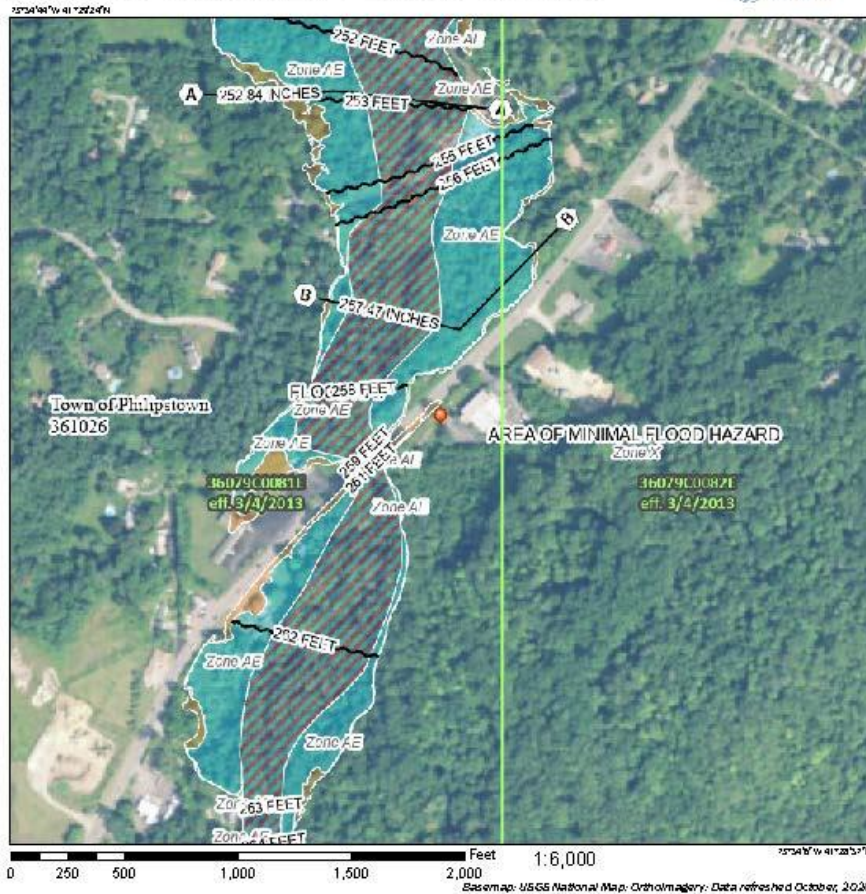
**Comment 3A.25: (Gainer):** Further, an "accessory bldg" for the equestrian center is shown, of unknown size and purpose. The need for the size of, and uses planned within, this building, as well as the manner its location was determined, should be explained. Placement of this structure closer to the equestrian center (possibly between the equestrian parking area and adjacent dead-end roadway), so as to reduce the overall area encumbered by the equestrian center and to increase wildlife corridors, should be considered. This is especially important since, as noted in the DEIS, seeps have been noted in this area and "...are fragile habitats that are an important resource for water dependent wildlife and vegetation". Yet, the proposed accessory building and related improvements (pavement/parking/manure enclosure/dumpster) are currently planned in proximity to the identified seeps.

**Response 3A.25:** The Equestrian Center has been removed as an element of the proposed project.

**Comment 3A.26 (Ford):** So I'm concerned with about a couple of things. One of the things I think about is, obviously, water quality. I would like to know how up-to-date the flood zone maps are.

**Response 3A.26:** FEMA, the Federal Emergency Management Agency, updated the flood zone maps in Philipstown in 2012. They became effective in 2013. The flood hazard limits line shown on the plans was downloaded directly from the FEMA website in a format that allowed direct import into the plan set. The limits shown on the plan are the limits provided by FEMA and not the product of the developer's designers. Figure 8 is a "Firmette," a localized Flood Insurance Rate Map, that shows the area. The map shows an effective date of March 4, 2013. No development is proposed within a flood hazard area.

# National Flood Hazard Layer FIRMette



**Legend**

SEE THIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

**SPECIAL FLOOD HAZARD AREAS**

- Minimum Base Flood Elevation (BFE) Zone A, V, AE2
- With BF Elevation Zone A, V, AE, AE, AE, AE
- Regulatory Floodway

**OTHER AREAS OF FLOOD HAZARD**

- 0.2% Annual Chertic Flood Hazard, Areas of 1% Annual Chertic Flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
- Areas Outside of 1% Annual Chertic Flood Hazard Zone X
- Area with Reduced Flood Risk due to Levee, See Note, Zone X
- Area with Flood Risk due to Levee Zone X

**OTHER AREAS**

- Area of Minimal Flood Hazard Zone X
- Effective ID MRs
- Area of Unimproved Road Hazard Zone X

**GENERAL STRUCTURES**

- Channel, Culvert, or Storm Sewer
- Levee, Dam, or Retention Wall

**OTHER FEATURES**

- Cross Sections with 1% Annual Chertic
- Water Surface Elevation
- Coastal Trench
- Base Flood Elevation (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Trench, Boundary
- Profile Boundary
- Hydrographic Feature

**MAP PANELS**

- Digital Data Available
- No Digital Data Available
- Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

**FIGURE 8: Flood Hazard Map**

**Comment 3A.27 (Ertl):** A.3658/ S.5576 wetlands protection  
 A.4666/ S.5612 protects streams

These two pieces of legislation would strengthen the protection of local wetlands and streams. Current DEC protection only covers areas that encompass 12.4 acres or more. And it has to be on a DEC approved grant. New York State is the only state without such corridors for small wetlands. More than a million species are at risk. This legislation would protect smaller wetlands, rivers, streams, creeks, lakes, and wildlife. So I encourage you not to hurry this project through, but to see what the State of New York is doing to protect our small wetlands.

**Response 3A.27:** The proposed wetlands protection legislation cited by the commenter, which would have extended NYS protection to wetlands of one acre or more, failed to pass, with its status listed as “Recommit, Enacting Clause Stricken” on January 20, 2020. The proposed stream protection, which would add protective status to class “C” streams, also failed to pass, with its status listed as “Enacting Clause Stricken” on January 28, 2020. Even if adopted, neither would have any bearing on the proposed project. The proposed project would not cross or encroach upon any wetlands or watercourses.



## B. VEGETATION AND WILDLIFE

**Comment 3B.1 (AKRF):** VEGETATION AND WILDLIFE The following ecological reports have been completed for the project site by the current and former property owner. Please verify that this is a comprehensive list:

- a. Phase I Biodiversity and Environmental Assessment. Stephen Coleman. 11.16.09.
- b. Additional Environmental Studies. Stephen Coleman. 7.1.10.
- c. Response to DEC comments. Stephen Coleman. 3.24.11.
- d. Additional Field Assessments. Stephen Coleman. 7.12.11.
- e. Timber Rattlesnake Habitat Assessment Report. Brandon Ruhe. 8.25.14 (revised 9.11.14).
- f. Wetland Delineation & Environmental Assessment Report. Stephen Coleman. 9.15.14.
- g. Limnology/WQ Report. Chris Doyle (Allied Biological). 6.29.15.
- h. Natural Resource Investigation. Hudson Highlands Environmental Consulting – Stephen Gross, Randy Stechert, Donald Smith. Joan Hansen. 8.12.15.
- i. Regarding Ulmar Pond Lake Mgt. Chris Doyle (Solitude). 2.15.18.

**Response 3B.1:** The list is correct, with the addition of a vernal pool study by David Griggs of ERS Consultants, Inc., April 26, 2019, attached as Appendix D.

**Comment 3B.2 (AKRF):** As discussed further below, keeping the proposed site plan to the more disturbed portions of the site where historic development and past surface disturbance occurred is appropriate. However, the proposed site plan extends beyond these areas into portions of the site with higher habitat value. This is not made clear in the DEIS and should be fully addressed in the FEIS.

**Response 3B.2:** The revised plans have removed proposed lots from any areas not classified as “developable” with the exception of the lot that includes the pre-existing historic home that will be renovated and sold as is. In addition, the historic barn will be adaptively reused as the HOA community center. Both structures were placed within the area classified as “high conservation value” specifically because of their cultural resource value, and to preserve these structures and reuse them.

**Comment 3B.3 (AKRF):** Coleman (11.16.09) identified "rocky well drained upland consistent with a Chestnut-Oak Forest and Oak-Tulip Forest... also exhibits species representative of the Appalachian Oak-Hickory Forest also described by Reschke 1990." However, presence of these NYSDEC-designated ecological community types onsite is discounted in the DEIS.

**Response 3B.3:** See Response 3B.15. Neither an Oak-Tulip Forest nor a Chestnut Oak Forest was identified on site during the site inventory performed in the summer of 2015. There were fragments of an Oak-Tulip Forest. In perhaps the largest area that may have been part of an Oak-Tulip community located east of the current Horton Road entrance into the site, the tulip trees were harvested around a decade ago. It is possible that these trees were still present at the time that Coleman did his inventory. When the site was inventoried, this area supported young successional growth. Fragments of the Oak-Hickory Forest were noted and included in the forested areas shown on the vegetation map, Figure 11.

**Comment 3B.4 (AKRF):** Coleman (9.15.14) identified "a plateau area just northwest of the pond consists of rolling, elongated ridge....species composition similar to an Appalachian Oak-Pine forest (Reschke 1990) which is dominated by white pine, black cherry, black oak, red maple, sugar maple, red oak and Christmas fern." This habitat type is not listed in the DEIS.

**Response 3B.4:** The plateau area is vegetated with a diverse community of trees that represents the Appalachian Oak-Pine Forest (see Response 3B.15, Figure 11). However, greater interspersions of tree varieties from adjacent tree communities has resulted in changes to the community. There are some small groupings of white pines and red cedars on the plateau, with maples and oaks comprising the dominant species in the Oak-Pine Forest community. White Pines and red cedars observed were being shaded out by the surrounding deciduous tree species.

**Comment 3B.5 (AKRF):** Coleman (11.16.09) finds Acidic Talus Slope ecological community type onsite, located "at the southeast end of the study area at the constriction point before entering the eastern portion of the lot (Parcel "A")". This community is not mapped/described in the DEIS.

**Response 3B.5:** Acidic Talus Slope ecological community was not identified anywhere within the project site. The presence of such a community was noted by herpetologist Randy Stechert, which he identified as potential copperhead denning habitat, as being just offsite on land identified as belonging now or formerly to Brucato. A photo of the talus slope and a location map are provided as Figures 9 and 9A on this and the following page.



Figure 9: Talus Slope (Offsite)



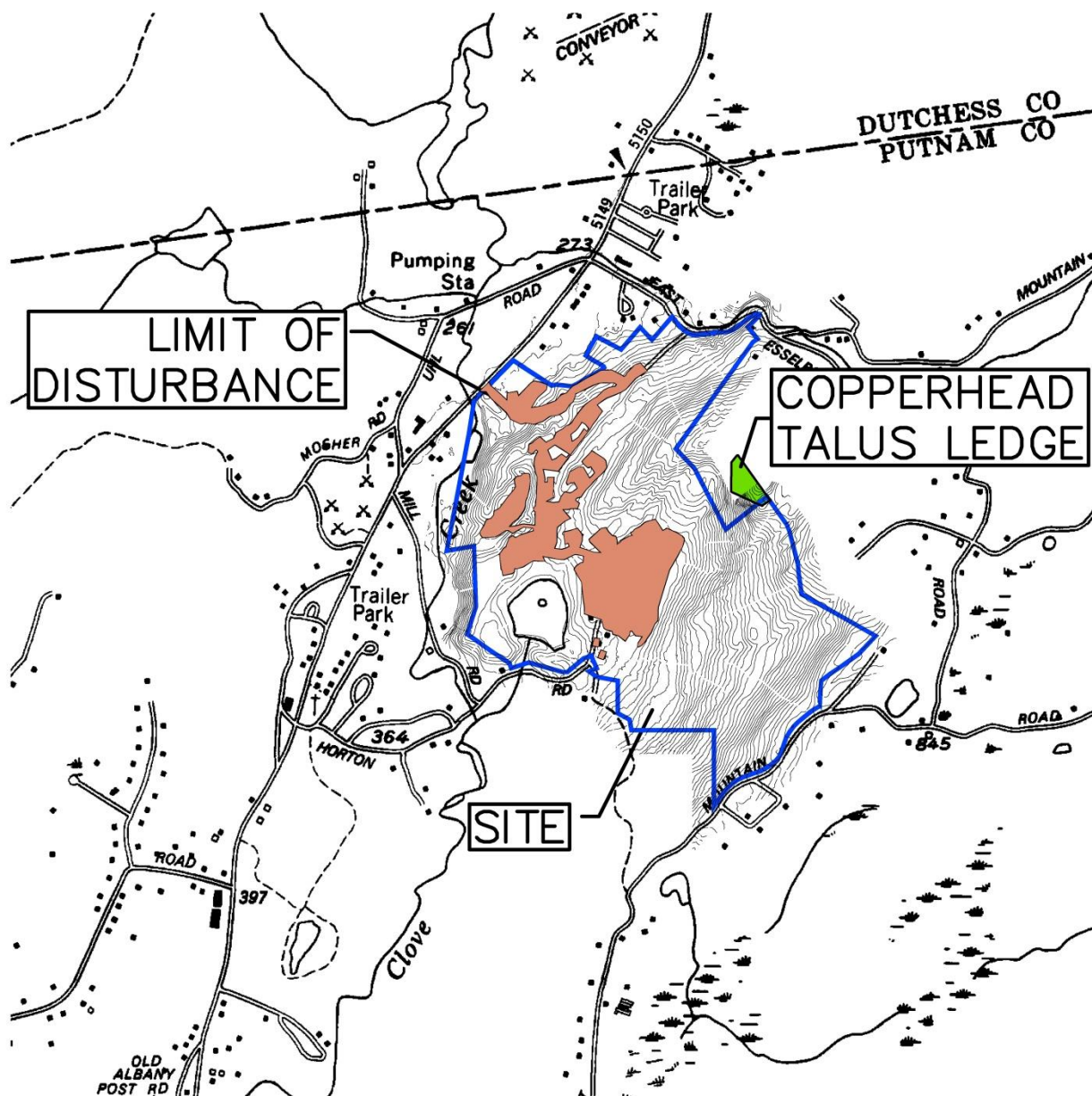


Figure 9A: Location of Talus Slope

**B.1. Vegetation Impacts and Mitigation**

**Comment 3B.6 (AKRF):** Based on information presented in the DEIS and appendices, AKRF is in agreement with the general findings of the Conservation Analysis, namely that the higher value conservation land consists of the less-disturbed forested lands within the more steeply sloped, eastern regions of the site and the lands proximal to Clove Creek and Ulmar Pond in the western and south-central portions of the project site. Retaining the eastern forested areas undeveloped in a conservation easement will help preserve the large contiguous forested lands extending east/south offsite which are of particular ecological and conservation value to the

Hudson Highlands region. Protecting the wetlands on the southern portions of the site and providing large undisturbed buffers adjacent to Clove Creek and the Ulmar Pond will benefit water quality and preserve plant/animal diversity. However, we feel that more must be done to achieve a site plan that adequately accomplishes these goals.

**Response 3B.6:** The following additional mitigative measures are proposed:

- **Non-native invasive species:** Means will be taken to eradicate barberry (*Berberis thunbergii*), and control Japanese stiltgrass (*Microstegium vimineum*) and garlic mustard (*Alliaria officinalis*) as is practicable. The process for eradicating barberry is typically a two-year process and it is highly effective. While it is unlikely that stiltgrass or garlic mustard can be eradicated, measures will be taken to minimize the areas where it grows and contain its spread.
- **Improve water quality and enhance wildlife habitat at Ulmar Pond:** Native emergent wetland plants and nectaring plants will be installed along sections of the shoreline not accessible to the public and within the buffer zone. Specifically, plants will be chosen that would trap sediments, take up nutrients and provide habitat for amphibians and foraging habitat for herons and other water dependent species, e.g. waterfowl, herptiles. Features, such as logs can be placed in shallow water to provide habitat for turtles and salamanders. Upslope of the shoreline, a border of grasses and plants will be created to provide a food source for some passerine species and nectaring plants for bees, butterflies, and hummingbirds.
- **Landscape for Wildlife:** To partially remediate the loss of forest habitat, the use of landscape plantings will be limited to native trees and shrubs that are deer resistant and that would benefit resident and migratory wildlife. Where appropriate, a shrub edge may be planted at the perimeter of the forested areas that border new housing to create a transition zone between forests and homes and help to replace the shrub habitat that is important to the birds and small mammal species recorded on site. Wildlife helps to sustain existing plant communities by increasing vegetational diversity resulting in increased wildlife diversity.

**Comment 3B.7 (AKRF):** The general picture of onsite habitats is clear. As described in the DEIS (p.79), "deciduous forests occur on more than 90 percent of the property" and (p.80) "...exotic species were found... surrounding the eastern access road...from Horton Road...and near Ulmar Pond. Portions of the property further removed from these areas...were occupied by native species generally absent of exotic species." Studies completed for the site by the current and previous property owners confirm this, indicating that the forest overstory on the majority of site is comprised of native species (oak, hickory, maple, tulip poplar) and that the understory is primarily native as well, with such species as maple-leaved viburnum, witch hazel, striped maple, low-bush blueberry, Christmas fern, etc. Where non-native species occur, these are typically Japanese barberry and garlic mustard at lower elevations. Despite this general picture, the extent of the non-native species colonizations on the site, and their adverse effects on habitat value cannot be measured from the information provided due to the sometimes conflicting record of information from past studies and due to internal discrepancies of habitat character/composition in the DEIS. The reason this is important to clarify is due to the frequent characterizations of onsite habitat as being low value due to non-native species colonization which is cited as minimizing the effects of the proposed development. For example: "The layout avoids those areas that are least disturbed and occupied by a community of native plant

species..." and "those areas infested with exotic plant species can be developed with the least environmental impact." (p.94); "The highest incidence of prior disturbance on the project site occurred within the areas now proposed for development, which had been historically subject to human occupation. Moreover, the proposed area of development has already been heavily impacted by the intrusion of invasive species." (p.96); "The proposed development has been placed within the portion of the project site closest to Route 9 and neighboring residential development. This area is already considered especially impacted by its proximity to these features, as well as due to existing site disturbances including occupied structures, roadways, cleared areas, and vegetated areas that are heavily compromised by exotic invasive species." (p.103). Descriptions in the DEIS, and in the past ecological reports that accompany the DEIS, do not fully support these characterizations.

**Response 3B.7:** The Project Sponsor believes that the latest description and statements provided in the DEIS are correct. Some changes may have occurred since earlier inventories, both through human activity and natural processes. The area that is densely vegetated with barberry is located north of the pond and is within the current plans for proposed site development. The area is of low value because it has compromised habitat value. The shrubs form a dense community that is almost impenetrable. During wildlife inventories, birds were not observed in the area, nor were there signs of mammals. However, NYSDEC notes that small rodents/mice frequently nest in the safety of the shrubs. A high concentration of other invasive/exotic species was found throughout the other areas proposed for development as well.

Changes in the plant communities have occurred in the recent past. The species composition of specific forest types is affected over time by natural occurrences and human disturbance. In nature, trees reach senescence or are affected by insects or disease, or loss due to storms. The openings created by loss of the overstory are often invaded by non-native invasive species as well as native plant species. On site, human activity resulted in the loss of an area of tulip trees that were harvested. Development along Route 9 has also created intrusion into the adjoining forested areas. Changes in the make-up of plant communities will result in changes in the wildlife species utilizing the site. The Conservation Area that will set aside 163 acres of forested land will protect a high percentage of the natural, undisturbed areas. Although construction will not be totally limited to low value habitat, it presents the opportunity to partially mitigate the loss of forested land and the pond by improving onsite habitat diversity with the use of native shrubs and trees at the edge of forested habitats bordering development and improving water quality in Ulmar Pond and thereby improving habitat for water dependent species.

**Comment 3B.8 (AKRF):** Non-native species such as Japanese barberry (*Berberis thunbergii*) and Japanese stiltgrass (*Microstegium vimineum*) occur frequently in forested habitats of the Hudson Valley. Their adverse effects on habitat value are typically minor unless they crowd out large expanses of other vegetation in all strata, which does not appear to be the case at the project site. In sum, the frequent focus in the DEIS on the adverse effects of non-native plant species appears over emphasized. The Town could consider enlisting the services of an independent ecological consultant to verify the ecological community types onsite, particularly within the footprint of proposed disturbance. In this way, the conflicting record of habitat value can be reconciled and project impacts properly gauged.

**Response 3B.8:** Currently, non-native invasive species, i.e., Japanese barberry and Japanese stiltgrass, are fairly localized in previously disturbed areas of the property. As noted above, growth is dense in some areas. As presented in the DEIS, the Project Sponsor acknowledges that development and fragmentation of forested habitats in the Hudson Highlands region have impacted these native habitats with the introduction and spread of exotic and invasive species. Before these species can “crowd out” native vegetation, they must first establish a foot hold and then continue to spread. Their mere introduction into areas of native vegetation is immediately an impact. With this in mind, the Project Sponsor indicates that the proposed development has been placed within areas that have been impacted with invasive species. This is not to say that these areas do not provide wildlife habitat. However, the fact that invasive species are already present within proposed development areas lessens the impact from what may occur if development was proposed within habitats that are more exclusively occupied by native vegetation.

Second, the development of already infected areas provides an opportunity for eradication. When developing areas with invasive species, a more concerted effort can be made to eradicate those species within the development area and replace with native plantings. Measures will also be taken to prevent their spread as soils are disturbed and moved by construction equipment. It is particularly important to prevent these species from invading the native plant communities, especially on the upper elevations which are largely undisturbed forested lands. Prior to any site construction, barberry shrubs will be eradicated and areas of Japanese stiltgrass will be controlled with proper treatment. Methods for treating the invasive species are detailed in the referenced web sites.

See: NYS Invasive Species Information: [http://nyis.info/invasive\\_species/japanese-stiltgrass/](http://nyis.info/invasive_species/japanese-stiltgrass/), <https://update-techline.squarespace.com/articles/2017/managing-japanese-barberry-in-natural-areas>

**Comment 3B.9 (AKRF):** The 8.12.15 vegetation survey says the project site examined ranged in elevation from 360 to 500 feet at the property boundaries — but the site elevation reaches 800 feet. Please verify that the survey examined the entire site or if just a portion the project site was assessed.

**Response 3B.9:** This statement comes from the Conservation Analysis in DEIS Appendix C, and reads “more than 500 feet”, not 500 feet, which would be technically correct. Nevertheless, it should have more accurately read “more than 800 feet.” This error was corrected in the DEIS, where there are several references to “more than 800 feet” and “890 feet” to describe the highest elevation at the property line, as well as in discussions of floral and faunal conditions that exist at higher elevations within the project site. All proposed disturbance, however, would occur below 500 feet, and all areas within these higher elevations will be preserved in their existing condition.

**Comment 3B.10 (AKRF):** The DEIS (p.106) suggests that planting of native species in home landscaping will counterbalance the project’s habitat disturbance and habitat fragmentation effects. In truth, roads/lawns create disturbance that facilitates the spread of invasive species even if native ornamentals are required by HOA guidelines. Such measures, if judiciously enforced for the life of a project, can only hope to minimize the spread of invasive species.

**Response 3B.10:** The DEIS (p.106) states that the loss of habitat (existing forest lands) can be “*partially remediated*” following construction by landscaping with trees and shrubs native to the area. The use of native species will help to restore and diversify habitat and attract wildlife and minimize impacts to forest edges adjoining the developed lots. In addition, the simple prohibition against using exotic/invasive species in landscaping will minimize the likelihood that such species may be introduced into natural areas of native vegetation. It is not possible to completely offset the impacts caused by development, but minimizing impacts with the installation of native species and creating a HOA and enforcing their guidelines can minimize impacts to the environment and help to avoid future environmental impacts. Further, as described above, a concerted effort will also be made to remove existing populations of invasive species within development areas.

**Comment 3B.11 (AKRF):** The site plan footprint (limit-of-disturbance) presented in the DEIS is larger than the plan presented in December 2016 immediately after completion of the approved conservation analysis, notably at: the location of three stormwater detention basins flanking the entrance road within Oak and Tulip Poplar-Hemlock-Hickory-Oak habitat types (Figure 26); at the first turn of the loop drive within Oak and Sugar Maple-Black Birch-Tulip Poplar-Hickory-Oak forest; at the emergency access road traversing the oak community in the northern portion of the site, and; at the Equestrian parking and new cul-de-sac for three residences at the easternmost portion of the site plan within Tulip Poplar-Sugar Maple-Oak and Sugar Maple-Black Birch-Tulip Poplar-Hickory-Oak forest. These changes are moving the site plan in the direction of greater ecological impacts, not reduced impacts.

**Response 3B.11:** The post construction stormwater mitigation practices had not previously been presented within the areas of disturbance prior to December 2016. To be in compliance with the New York State Department of Environmental Conservation SPDES General Permit for Stormwater Discharges from Construction Activity, GP-0-20-001, the project will need properly selected and sized post construction stormwater practices. The practices will treat the water quality volume, recharge the runoff reduction volume, and mitigate any potential increase in runoff from the project site. The stormwater practice areas will be planted with a variety of native plants, shrubs and trees and provide habitat to a variety of wildlife.

The areas where the stormwater practices will be located have been removed from the Conservation Area. They are now included in the HOA area that will not be subject to the Conservation Easement. This was done because practices will need periodic inspection and maintenance, which will be conducted by contract through the HOA.

The overall disturbance anticipated to occur under the revised plan has been reduced by 7.6 acres, from 45.7 acres to 38.1 acres (see Figure 10 on following page). This was accomplished, in large part, by shortening the road system and eliminating the equestrian center.





Drawing Name: FEIS\_FIGURE\_10\_R19

Layout: LOD

W.O. No.: 21792

FILE No. 86-228

FIGURE 10: Changes in Limit of Disturbance

**Comment 3B.12 (AKRF):** Some figures (e.g. Fig 19) show the limit-of-disturbance (LOD) line including the SSTS Reserve Area, several do not (Figure 30). Some appropriately show the LOD including the proposed residential lot-lines as the boundary of potential disturbance (Fig 30), others do not (Fig. 19, Fig. 20, Fig. 33). The LOD must include the outermost grade lines and the entirety of the residential lots to account for potential future disturbance. Despite the best intentions of HOA Declarations, individual homeowners may clear to their lot lines in the future to the detriment of the intent of the Conservation Subdivision. No portion of the residential lots is within the proposed Conservation Easement area (Fig. 17) so their future development is a potential reality. In order for the lead agency to measure the potential adverse environmental effects of the development, the FEIS must make clear and consistent how much acreage will be disturbed/preserved at the outset of development plus what additional lands could be disturbed in the future due to the reserve SSTS and future homeowner clearing, in graphical and table form.

**Response 3B.12:** The figures have been revisited to correct any inconsistencies and address changes in the plan that resulted from the SEQRA process. They are attached as Appendix C.

The commenter states that: *“Despite the best intentions of HOA Declarations, individual homeowners may clear to their lot lines in the future to the detriment of the intent of the Conservation Subdivision.”* The designers have provided space on each of the residential lots for development of individual home use and a limited amount of infrastructure, such as a driveway, patio, utility lines, stormwater management structures and a well, to support the use and enjoyment of the homes. In general, this was accomplished by first identifying a logical location for a house considering such things as accessibility, grade, setbacks and the location of other houses. Next, a driveway route was identified considering items such as access from the road, grades, and drainage. Finally, an estimate of what outside space a lot owner might want to use was added. These were estimates made with an understanding that each home on each lot would be the subject of a detailed individual site assessment and design before any actual construction would be undertaken. Moreover, an inspection of the anticipated disturbance is generous, particularly on Lots 1 and 20, which are already improved with single family residences and are unlikely to experience any substantial disturbance. The following table shows the total area of each lot and the anticipated disturbance within the lot in both area and as a percent of the lot.

As the table demonstrates, the designers have anticipated that an average of 67.9 percent, and as much as 100%, of the area of the residential lots might be disturbed. The Project Sponsor considered that the lots will not have individual septic systems, which normally contributes substantially to the disturbance on an individual lot.

The sponsor has elected not to provide building envelopes within each individual lot. This is to allow each of the lots flexibility in the design process. Instead, the sponsor has developed enforceable rules and regulations and penalties that will be imposed on each of the lots to assure that the goals of the Conservation Subdivision are respected.

Lot Number	Lot Area	Anticipated Disturbance	
	Square Feet	Square Feet	Percent of Lot Area
1	129,773	23,043	17.8%
2	38,399	24,507	63.8%
3	40,744	26,605	65.3%
4	44,855	18,951	42.2%
5	37,672	27,192	72.2%
6	30,937	20,886	67.5%
7	53,221	35,110	66.0%
8	72,190	41,415	57.4%
9	44,275	26,638	60.2%
10	51,400	30,833	60.0%
11	51,798	39,974	77.2%
12	41,463	32,488	78.4%
13	52,332	44,805	85.6%
14	43,993	40,231	91.4%
15	42,496	40,953	96.4%
16	40,500	40,500	100.0%
17	40,500	40,140	99.1%
18	40,462	35,215	87.0%
19	37,580	23,729	63.1%
20	57,637	46,160	80.1%
21	41,931	37,163	88.6%
22	43,397	28,914	66.6%
23	40,133	39,391	98.2%
24	45,233	24,372	53.9%
Total	1,162,921	789,215	67.9%

As indicated in Appendix I of the DEIS, The Declaration of Covenants and Restrictions at Article VIII, Section 1, page 20 provides that an Architectural Review Board (ARB) must be established by the HOA. The HOA's ARB will be responsible for the establishment and administration of the "Residential Design and Maintenance Rules and Regulations" to be established by the sponsor. These rules and the "General Rules and Regulations" found in Appendix J of the DEIS are binding on the individual lot owners. "Article I, Section 1" of the "General Rules and Regulations" states, among its purposes, the rules and regulations are to establish and "promote respect and sensitivity for the natural environment" and to "Suggest strategies for sustainability and energy efficiency". The General Rules and Regulations lists 62 areas where it controls specific activities on the residential lots. Perhaps most relevant among them is the control of tree removal.

Lot owners intending to build a new home or make any changes to their residential lot must submit their plans to review and approval of the HOA's ARB. This is in addition to any regulations that may be imposed by the Town of Philipstown under its planning and zoning laws.



**Comment 3B.13 (Hammond):** Conservation findings recommended that invasive barberry and stilt grass be removed but no plan for removal is mentioned in the DEIS. This may seem small but addressing it would be evidence of good faith.

**Response 3B.13:** See Response 3B-8. Prior to any site construction, barberry shrubs will be eradicated and areas of Japanese stiltgrass will be controlled with proper treatment. Methods for treating the invasive species are detailed in the referenced web sites.

See: NYS Invasive Species Information: [http://nyis.info/invasive\\_species/japanese-stiltgrass/](http://nyis.info/invasive_species/japanese-stiltgrass/), <https://update-techline.squarespace.com/articles/2017/managing-japanese-barberry-in-natural-areas>

## **B.2. Wildlife Impacts and Mitigations**

**Comment 3B.14 (AKRF):** Ecological analyses should include a vernal pool study conducted during the appropriate season (March/April). If a vernal pool(s) is present, protection of forested buffers should be provided, in accordance with MCA Technical Paper Series: No. 5. Conservation Pool-Breeding Amphibians in Residential and Commercial Developments in the Northeastern United States. (Klemens and Calhoun, 2002). This issue had been raised by the Planning Board and others during the completeness review.

**Response 3B.14:** A vernal pool investigation was conducted by ERS Consultants, Inc. Surveys of the property were conducted on April 6, 2019 (6.0 hours), April 13, 2019 (5.5 hours), April 18, 2019 (5.5 hours) and April 23, 2019 (5.0 hours). This is in line with the recommendations of the New York State Department of Environmental Conservation (NYSDEC), which states on their web page that “April is generally a good month to visit vernal pools in New York”. During the field survey of the entire subject site, no vernal pools were observed. This study is consistent with previous studies conducted in the subject site. Those reports include the Wetland Delineation and Environmental Assessment – Initial Report by Stephen W. Coleman Environmental Consulting (2014) and the Wetland Delineation and Environmental Assessment – Supplemental Report by Hudson Highlands Environmental Consulting (2015). Additionally, no endangered, threatened or species of concern were observed. No egg masses were observed within the subject property. During the same time period, egg masses were observed on two sites on adjacent properties north and east of the subject site. The vernal pool report is attached as Appendix D.

**Comment 3B.15 (AKRF):** There is no detailed description of each ecological community (habitat cover type) corresponding to the communities shown in Figure 26 in the DEIS. Instead, there is a general description of the forest communities at page 79 describing the overall site. In order to gauge habitat impacts from the proposed project, the vegetation cover types shown in Figure 26 must be reconciled with:

- a. The previously demarcated "potential development area" mapped by the conservation analysis completed for the site;
- b. The previous habitat descriptions of the site provided by ecological consultants (Coleman, Ruhe, Hansen); and,

c. The sometimes low habitat-value descriptions due to non-native species colonization provided in the DEIS chapter. While the descriptions provided under "vegetation associated with seeps" and "vegetation along stream corridors" (p.80) are helpful and specific, the vegetation description under "upland deciduous forest community" (p. 77 and 79) does not clearly indicate how/if it corresponds to the habitats shown in Figure 26: Vegetation Associations.

**Response 3B.15:** During the site inventory by Hansen, twelve plant communities were identified. Most of the land is forested with specific species of trees comprising each community. The most common tree species identified were sugar maple, hickory, and oak. These species were identified either in association with each other or singularly in most of the communities. The area covered by each community is mapped on Figure 11 (DEIS Figure 26) on the following page, and a detailed description of each community follows in paragraphs A-L.

**A - Sugar Maple-Black Birch-Tulip Poplar-Hickory-Oak Community – 32.9ac**

The trees in this community create a dense forest over a large portion of the western section of the property. Sugar maple (*Acer saccharum*) is the dominant species followed by species of hickory (*Carya* sp.) and oak (*Quercus* sp.), tulip poplar (*Liriodendron tulipifera*), and black birch (*Betula lenta*). Japanese barberry (*Berberis thunbergii*) and Japanese stiltgrass (*Microstegium vimineum*) was common in the understory in the southernmost section north of Ulmar Pond.

**B -Black Walnut-Maple Community – 0.65ac**

In the southeast corner of the property, there is a small community of black walnut (*Juglans nigra*) trees growing in a wet swale. The mature trees are producing nuts and because of the various ages of the trees, there is obviously recruitment. Red maples (*Acer rubrum*) are interspersed among the walnut trees.

**C – Oak Community-31.75ac**

A variety of oaks grow within this community including white (*Quercus alba*), red (*Quercus rubra*), pin (*Quercus palustris*), and chestnut oaks (*Quercus prinus*). The Oak Communities exist in three main areas that extend from southwest to northeast in the western section of the property. Chestnut oak grows more frequently at the higher elevations and pin oak was more common in moister soils. Both red and white oaks were seen growing on dry soils.

**D – Early Successional Field, Tulip Poplar, Hemlock, Oak Community – 4.8ac**

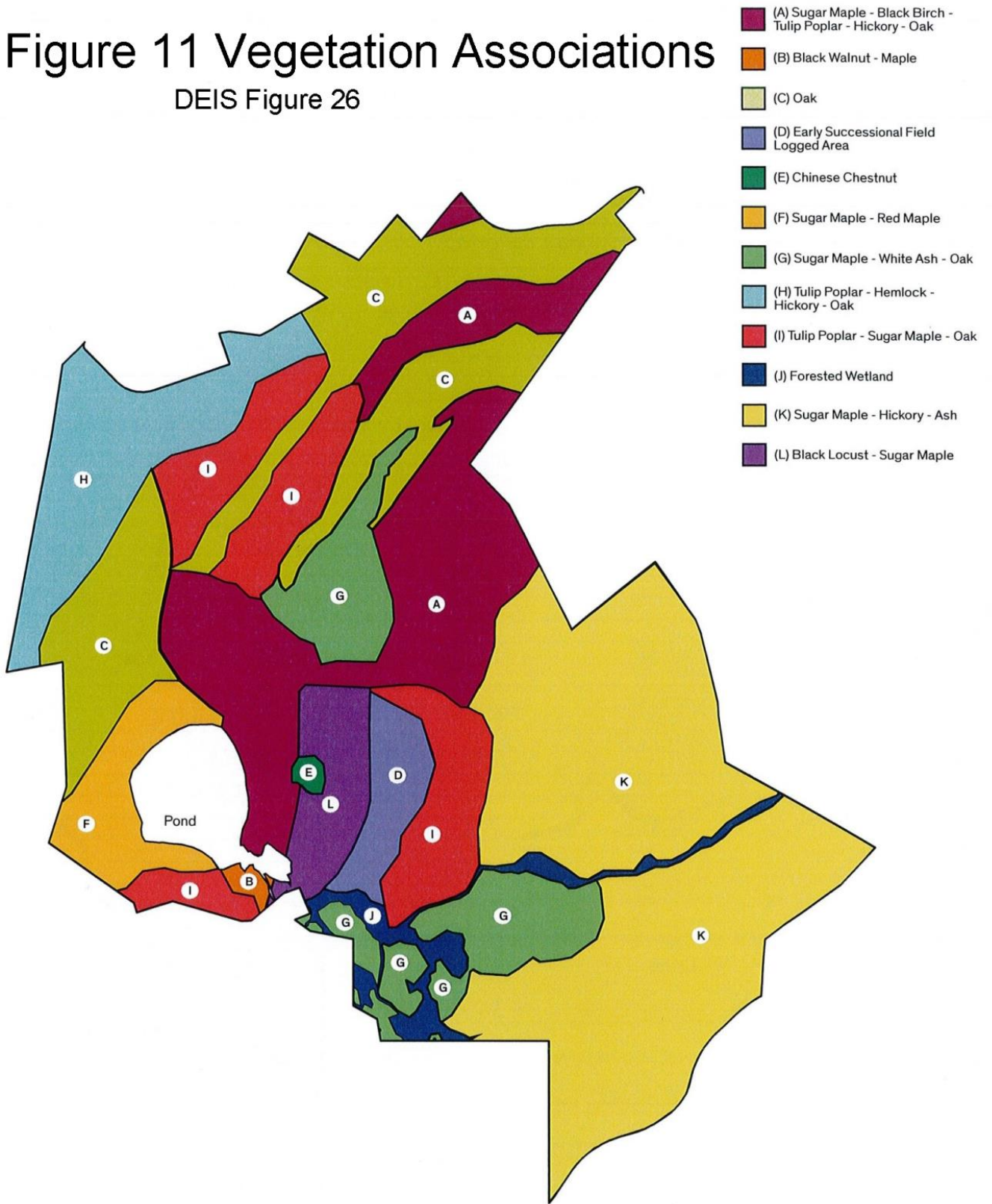
The field habitat is located at the base of the escarpment in a south-central section of the property. It extends along the escarpment as a narrow band. The area was formerly forested by tulip poplar that was logged in the recent past. Early successional growth consisting mainly of young oaks and tulip poplars and herbaceous plants, primarily species of goldenrod (*Solidago* sp.), aster (*Symphyotrichum racemosum*), and grass species that included Japanese stiltgrass now cover the area. Bordering the field are young-aged tulip poplar, hemlock (*Tsuga canadensis*), and oak species.

**E – Chinese Chestnut Tree Community-0.46ac**

On an old homestead located in the southwest section of the property, there is a small grove of mature Chinese chestnut (*Castanea mollissima*) trees that are producing nuts. The trees grow near an old chicken coop. Beneath the trees, the understory is interspersed with shrubs, woody vines, and grasses.

# Figure 11 Vegetation Associations

DEIS Figure 26



F – Sugar Maple-Red Maple Community – 6.34ac

Maples are the dominant tree in the area west of the pond. Sugar and red maples form a wide, forested, band that extends from the south to the north end of Ulmar Pond. Red maples are more common in the moister soils along the pond shoreline where there is interspersed wetland trees, shrubs, and herbaceous plants.

G – Sugar Maple-White Ash-Oak Community -16.9ac

The Sugar Maple-White Ash-Oak Community is located northeast of Ulmar Pond in the center of the property. The understory was dominated by low-bush blueberry (*Vaccinium angustifolium*), maple-leaved viburnum (*Viburnum acerifolium*), ferns, and grasses.

H – Tulip Poplar-Hemlock-Hickory-Oak Community –1.5ac

This community is located at the northern end of the property at the top of an escarpment. Large, mature trees were found throughout the community. Additionally, two less common perennials, blue cohosh (*Caulophyllum thalictoroides*) and black cohosh (*Actaea racemosa*) were identified in the understory along with species of ferns and grasses which were growing in small, sunny openings in the tree canopy.

I – Tulip Poplar, Oak, Sugar Maple Community -20.5ac

In the northwest section of the site, there are two linear forested areas of tulip poplar, oak, sugar maple communities extending from southwest to northeast. Because of the shading effect of the dense canopy, the understory was sparsely vegetated with shade tolerant plants.

J – Forested Wetland Community – 5.9

The wetland community was located along the braided creek and drainageways in the southern section of the property. Trees growing in the wet soils included red maple, black birch, shagbark hickory (*Carya ovata*), and American Hornbeam (*Carpinus caroliniana*). The sparsely vegetated understory consisted of several species of shrubs that included maple-leaved viburnum, spicebush (*Lindera benzoin*), and witch hazel (*Hamamelis virginiana*). Trout lily (*Erythronium americanum*), fern species and grasses also grow in the wet soils.

K – Sugar Maple-Hickory-White Ash Community – 58.8ac

The Sugar Maple-Hickory-White Ash Community covers most of the landscape in the eastern section of the property. The tree species grow at all elevations and form a dense canopy which creates habitat for shade-tolerant plants. Growing in the shaded, sparsely vegetated understory were low-bush blueberry, maple-leaved viburnum, and species of ferns and grasses.

L – Black Locust-Sugar Maple Community – 6.2ac

The Black Locust-Sugar Maple Community is a small, linear area located in the south-central section of the property north of Ulmar Pond. Black locust trees (*Robinia pseudoacacia*) are native to the Midwest and have spread to the east coast. They typically become established in areas where soils have been disturbed and spread rapidly. Because they are in an area that was previously disturbed, it was likely they were introduced and became established in the Sugar Maple Community. It is not a tree that is desirable to have in the matrix of trees that are native to the Hudson Valley.

**Comment 3B.16 (AKRF):** Although there is some disagreement between the studies completed to date on the project site regarding the potential presence of the timber rattlesnake (*Crotalus horridus*), studies presented by Coleman/Ruhe and the Conservation Findings (Appendix B, p.5) indicate that at minimum the site may provide summer foraging habitat for this species. Considering the varied record, the lead agency will find it difficult make its own determination on the proposed project's potential effects to this NYS "threatened" species. Therefore, the Applicant should implement the Mitigation Recommendations of NYSDEC's "Guidelines for Reviewing Projects for Potential Impacts to the Timber Rattlesnake" for the protection of timber rattlesnakes during construction of the proposed project.

**Response 3B.16:** The most recent timber rattlesnake assessment for the project site was conducted by Richard "Randy" Stechert. Mr. Stechert serves as a frequent consultant to the NYSDEC on timber rattlesnakes, and is personally responsible for having located approximately 81% of the known timber rattlesnake dens recorded by the NYSDEC across the state. He is arguably the top rattlesnake expert in New York State, and is highly familiar with the location of rattlesnake dens in the vicinity of the project site, as well as their habits and range. According to Mr. Stechert, while possible, the odds of any rattlesnake utilizing the property is extremely low, estimating it to be on the order of "a single male timber rattlesnake foraging on the property about once every ten years." Given there is the chance for timber rattlesnake use of the project site, the Project Sponsor will implement mitigation recommendations of NYSDEC's "Guidelines for Reviewing Projects for Potential Impacts to the Timber Rattlesnake" for the protection of timber rattlesnakes during construction should it be required by the Department. Following approval, the Project Sponsor will initiate coordination with the NYSDEC to determine if the Department will require that the protection measures be implemented. All correspondence and communication with the NYSDEC will be shared with the Town.

**Comment 3B.17 (AKRF):** The DEIS at p. 87 (B.1.b.iii) does not provide the USFWS summer roosting season tree removal restriction dates for the federally "endangered" Indiana bat (*Myotis sodalis*), which is April 1 to September 31, depending on distance to hibernaculum. (USFWS NY Field Office, Indiana Bat Project Review Fact Sheet).

**Response 3B.17:** Tree clearing will be limited to the period starting on November 1 to March 31 in accordance with the tree clearing window for the Northern Long Eared Bat. This also falls within the tree clearing window for the Indiana Bat, which runs from October 1 to March 31.

**Comment 3B.18 (AKRF):** Regarding forest interior-nesting birds, this ecological function would be adversely affected by the proposed project and should be termed an unavoidable adverse impact. The suggestion that such impacts can be "remediated...by landscaping with trees and shrubs native to the area..." (p.106) is not accurate.

**Response 3B.18:** The DEIS on p. 106 states that "*(t)here are at least 15 species of birds that were recorded on site that could potentially be affected by the project primarily as a result of loss of woodland habitat,*" and these species include both interior forest species, as well as common species such as turkey and crow. It later states that forest impacts can be "*partially remediated following construction by landscaping with trees and shrubs native to the area that will provide nesting habitat and a food source.*" The DEIS does not state that this will eliminate the impact, nor fully remediate the impact. This is accurately noted as a measure that would provide partial remediation for the identified impact, and that can and should be taken.

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The elimination of habitat will be an unavoidable environmental impact as a result of construction, but it is unlikely to have a significant adverse impact to preserved forested areas where more wildlife was observed. According to Conroy, DEIS, p. 106, the forest interior will not be fragmented but there will be some habitat perforation and impact at the forest edge. Without significant adverse impacts to the forest interior, and construction limited to the forest edge, forest-interior wildlife would not be significantly adversely affected. Installing native vegetation in the landscape on each lot would benefit wildlife and aid in restoring and increasing the area of shrub habitat that currently exists.

**Comment 3B.19 (AKRF):** Insufficient analysis is provided regarding adverse impacts, and potential impact avoidance measures, to the State-protected or rare wildlife species identified or expected to occur onsite based on available habitat. These include northern copperhead snake, eastern hognose snake, eastern worm snake, eastern box turtle, wood turtle, and red shouldered hawk. For example, eastern hognose and worm snakes are found in old field habitat — however, it appears the majority of this habitat is to be developed. True cluster development to preserve specific habitat areas, and measures to preserve existing upland-wetland linkages are among those that should be further examined in the FEIS in reference to these species.

**Response 3B.19:** Copperheads certainly occur on the site, but are not protected species. Hognose and eastern worm snakes, which are species of special concern, have not been documented, but are assumed to occur on the project site. They utilize diverse habitats, of which old field habitat is just a part. There is no specific habitat which could be targeted to be preserved for either of these species. Old field habitat is not prevalent on the project site, and is essentially limited to areas previously disturbed for an earlier proposed use of the site. These disturbed areas are ideal locations to place new development. It is the Project Sponsor's opinion that the currently proposed layout represents a clustered development, because it will set aside 77.6% of the project site as an undisturbed open space through a conservation easement. This open space includes all wetlands and all watercourses, as well as large areas of adjacent upland. The habitat types being set aside, inclusive of the most important upland-wetland linkages, will be beneficial to all of the species listed in the comment. Further discussion regarding the potential impact on salamanders and wood turtle can be found in Response 3B.22. Red-shouldered hawks are addressed in Responses 3B.23, 3B.30, and 3B.61. Discussion regarding box turtles can be found in Responses 3B.23 and 3B.31.

**Comment 3B.20 (AKRF):** At pg. 106: "Constricting light and sound disturbance has also been shown to lessen the impact of development." Aside from citing the existing site topography, no specific measures proposed by the Applicant to minimize lighting/sound are discussed.

**Response 3B.20:** The individual homes and the community building that will be constructed within Hudson Highlands Reserve will require outdoor lighting. It is acknowledged that uncontrolled, lighting can be an annoyance to neighbors and passersby, and it could contribute to the destruction of the relatively dark sky enjoyed in the area. The HOA and its members will be governed by the "General Rules and Regulations of the Hudson Highlands Reserve Homeowners Association" and the "Residential Design and Maintenance Rules and Regulations", contained therein. The "General Rules and Regulations..." are included as Appendix J of the DEIS. Page 33 of the "Residential Design...Regulations" offers guidance and rules that are designed to reduce the negative effects of outdoor lighting. These regulations

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include limitations on brightness and color, and specify that “Exterior lights must be shielded to reduce light pollution and glare.” The regulations also specify how lights should be mounted and directed to minimize glare onto neighboring properties. While there is no specific reference to lighting being “night sky compliant,” the sponsor will introduce the requirement into the HOA rules when they are modified to respond to the changes effected by the SEQRA process.

Noise, as opposed to sound, is an annoyance to people and considered a nuisance. Among the General Rules of the HOA is rule “e” found in Section 1 at page 1. It states that “*No nuisances shall be allowed upon the Properties nor shall any use or practice be allowed which is a source of annoyance to residents or which interferes with the peaceful possession and proper use of the property by its residents.*” Such regulation is clearly applicable to objectionable noise.

All Homeowners must be Members of the HOA and subscribe to its rules and regulations. As discussed more thoroughly in Response 3B.12, the HOA has enforcement powers and the powers to penalize members that do not abide by the rules.

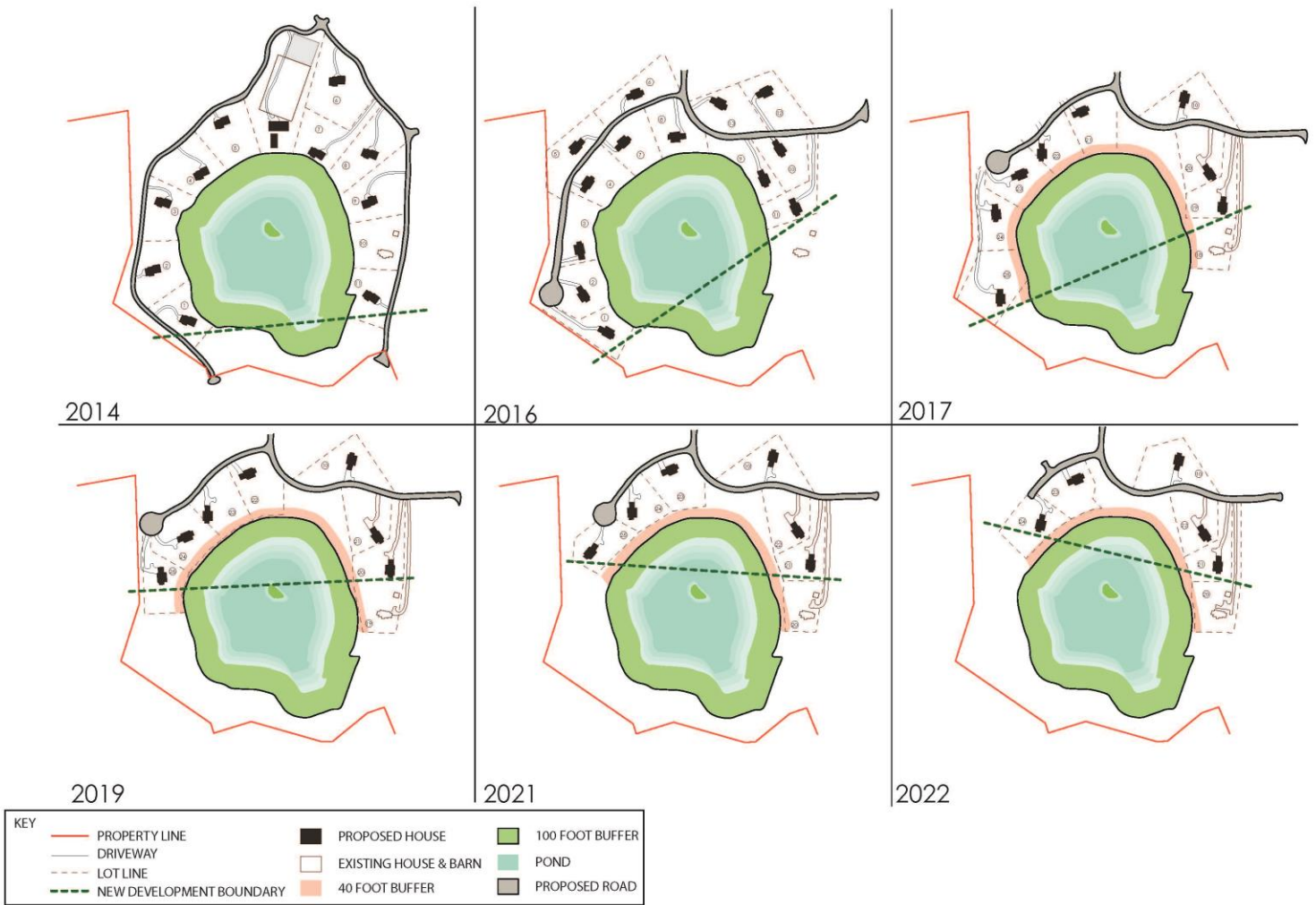
Any negative noise or light impacts associated with the Equestrian Center will not occur because the Equestrian Center is no longer an element of the project.

The Town of Philipstown Town Code section 175-40.C on noise must be adhered to both during construction and by the homeowner when the project is complete.

**Comment 3B.21 (Conservation Board):** Two Critical Wildlife Corridors Should be Widened. Two of the most critical wildlife corridors within HHR are, as currently proposed, either unacceptably constricted and/or blocked. Modern wildlife science has established that wildlife does not naturally use narrow, slot-like corridors, particularly when the corridors are adjacent to human settlement or commercial livestock. Two critical proposed HHR corridors should be opened and/or widened. The first corridor runs between Clove Creek and Ulmar Pond. The five houses on the West Side of Ulmar Pond should be moved to other developable land, in order to open that corridor. Likewise, the Equestrian Center, as proposed, impinges significantly on the corridor from the eastern side of HHR to Ulmar Pond, particularly given the presence of 40 horses within it. The Equestrian Center should be reconfigured so as to widen that corridor materially.

**Response 3B.21:** The primary wildlife corridor between Clove Creek and Ulmar Pond is the connecting watercourse that drains Ulmar Pond to the Clove Creek. The watercourse, pond, and surrounding wetlands will be preserved in their entirety. The number of homes on the west side of Ulmar Pond has been reduced to two in the revised proposed plan to further limit potential impacts to wildlife movement. In the Applicant’s opinion any impacts that may remain would not be significant. Figure 12 depicts the history of revisions made to the homes proposed in the vicinity of Ulmar Pond, which have greatly increased the amount of area available for wildlife movement.





**Figure 12 Plan Revisions Around Ulmar Pond**

The Equestrian Center has been removed as an element of the proposed project. Homes are now proposed in the area previously proposed for the Equestrian Center, but have been placed to allow a corridor surrounding the preserved watercourse/wetland system draining to Ulmar Pond. The stream, wetlands, and wetlands buffer in this area were not proposed to be disturbed under the previous versions of the proposed project. This is also the case with the proposed layout presented in this FEIS. Compared with the plan in the DEIS, there is an increase in separation between the wetlands buffer and a corresponding widening of the wildlife corridor being preserved. The following table compares the distances from the wetland buffer, to the nearest proposed pavement, bio-area and building in the vicinity of the end of Reserve Road.



Table 13			
Design Version	Distance Between Wetland Buffer and Nearest Proposed		
	Pavement	Bio Area	Building
With Equestrian Center	45 feet.	40 feet	135 feet
Without Equestrian Center	165 feet	92 feet	145 feet

**Comment 3B.22 (Schuster):** The Philipstown community should KNOW whether or not vernal-pond-requiring species of state-level conservation concern like the marbled and spotted salamander, and other wetland-requiring threatened species like the wood turtle, are on site. The DEIS as it stands does not present appropriate surveys to draw conclusions on this.

**Response 3B.22:** These species are all likely found on the project site, despite not having been observed and the documented absence of vernal pools with the site boundaries. These species are not obligated to vernal pools for their life cycle, and have been known to use other features, including roadside ditches and wetlands. Vernal pools do exist offsite that would also support the life cycle requirements of these species. The most valuable habitat onsite for these species, including all the wetlands and watercourses, large adjacent areas of upland, and Ulmar Pond, are being preserved as permanent open space.

**Comment 3B.23 (HHLT):** Insufficient Mitigation of Significant Impacts: Significant impacts to NY Species of Special Concern, such as the observed red-shouldered hawk and eastern box turtle are identified but, for the eastern box turtle, the only mitigation action proposed is to move turtles elsewhere if they are discovered on site during construction. Relocation of eastern box turtles is harmful to the species, and is associated with high mortality. In the case of the red-shouldered hawk, the sole mitigation action proposed is to protect the upland 50+ acre forested parcel, despite the DEIS stating that “Nesting almost always occurs near water, such as a swamp, river or pond.” Similarly, potential impacts to wood thrush, a Species of Greatest Conservation Need, were inadequately addressed.

**Response 3B.23:** The red-shouldered hawk that was observed during three of the four site visits during the period from May 6<sup>th</sup> to August 1<sup>st</sup>, was observed soaring above forested lands east of the existing extension of Horton Road, an area designated as an area of High Conservation Value in Figure 4. A nest site was not confirmed during the site survey, and it is extremely likely that the hawk uses the project site for foraging, but is nesting offsite. The wood thrush was heard on May 26, 2015, in the wooded area north-northwest of the pond, an area partially proposed for development and partially designated as having Medium Conservation Value. Its presence in this area does not equate to this area being used for nesting. The preferred nesting habitat consists of late-successional, upland mesic forests with a moderate to dense shrub layer in areas with running water, moist ground, and high understory cover. As noted on DEIS page 97, the area proposed as conservation land will permanently preserve this type of habitat on the project site, inclusive of the area where the red-shouldered hawk was

observed. Preserving this existing habitat is the most effective possible mitigation. Suitable nesting habitat for both these species is available nearby on both privately-held and public lands, but especially within the protected Fahnestock State Park and Hudson Highlands State Park. The preserved open space at Hudson Highlands Reserve will protect habitat used by both bird species present on the project site.

The commenter is correct regarding the potential success of relocating box turtles. The elimination of wildlife habitat is an unavoidable impact of any development that takes place on raw land, and there may be some loss of population. However, the only evidence of box turtles found during onsite surveys was in an upland area immediately adjacent to a watercourse in the upper elevations of the land proposed for preservation. Setting aside this land therefore represents the permanent preservation of known box turtle habitat, and is the best possible mitigation for potential impacts to box turtles.

**Comment 3B.24 (HHLT):** Insufficient Mitigation of Significant Impacts: Four NY “Species of Special Concern” are mentioned in the DEIS, including two that were observed on the property – eastern box turtle and red shouldered hawk. The DEIS stated: “It is therefore critical that the proposed project preserves this portion of the property, and as much as possible of other forested portions of the site as contiguous habitat, including measures to preserve wildlife corridors throughout the site.” (DEIS Page 99). However, no specific mitigation steps for the impact of the fully developed area on their habitat or these corridors were offered other than mention of the conservation easement on the upland slopes (DEIS Page 99) and mitigation incidental to steps taken to protect bat habitat.

**Response 3B.24:** See Response 3.23 for discussion of the red-shouldered hawk. The proposed Conservation Easement includes all onsite wetlands, all watercourses, Ulmar Pond, all floodplain, and upland areas surrounding these features beyond legally required buffers. While some areas crossed by wildlife will obviously be unavoidably developed, the most valuable identifiable wildlife corridor follows the braided stream wetland system crossing the property from its eastern border, through Ulmar Pond, and then along the Ulmar Pond outlet to the Clove Creek. This stream and wetland system has been preserved in its entirety, along with an upland buffer on either side. This level of protection and land preservation constitutes highly effective, specific mitigation steps not typically found in development proposals, including many other cluster proposals that often include wetland and stream crossings.

**Comment 3B.25 (HHLT):** Necessary Wildlife Corridors are Blocked: One of the major conclusions in the Steven Coleman letter dated September 2014 in DEIS Appendix C is the necessity to protect the wildlife corridor between Clove Creek and Ulmar Pond. However, this is overlooked in the Site Plan design by placing five (5) houses and a road along the west side of Ulmar Pond, thereby blocking this corridor, and creating a potentially significant impact to amphibians and reptiles without any compensatory mitigation.

**Response 3B.25:** The September 2014 Coleman letter discusses the importance of maintaining wildlife corridors to Ulmar Pond, however, it does not identify a corridor along the west side of the pond. The letter makes reference to the “Creek wetlands”, a name he applies to the braided wetland system east of Ulmar Pond, not Clove Creek, where he advises consideration in designing the project layout to maintain a wildlife corridor between the wetlands and the pond; *“The location of the proposed development (houses around the pond, road*

*networks and equestrian facilities may interfere with some of the movement patterns of wood turtles and other reptile and amphibian species that may travel between the Creek wetlands and the adjacent pond to the southwest, and also make the site less attractive to forest interior bird species... Provisions should be made as part of the subdivision layout to accommodate the ability of wildlife species to move freely throughout the site.*” The proposed project design developed since 2014 follows this guidance, preserving all of the “Creek” wetlands – Ulmar Pond system, which makes up the core of the wildlife corridor.. Some of the changes made after Mr. Coleman’s recommendations included moving the equestrian center away from Clove Creek, redesigning the road layout to allow more north-south movement, purchasing the large 50-acre property to the east in order to preserve it and more wildlife corridors, and purchasing the commercial lot on Route 9 in order to move the entrance road farther away from Clove Creek. As also suggested by Mr. Coleman, a low stone boundary wall will be installed to demarcate the 140-foot buffer around Ulmar Pond.

Mr. Coleman then goes on to mention the Clove Creek in a separate sentence; *“This is especially important to allow movement corridors between the adjacent Clove Creek wetlands and the pond in the southern portion of the parcel, and also maintaining a south to north connection along the eastern side of the parcel.”* As noted, however, no mention is made of the houses around Ulmar Pond, or a corridor over the steep slope from the pond’s western side. In the Project Sponsor’s opinion, the steep slope (approximately 76%) between the Clove Creek and Ulmar Pond does not constitute a wildlife corridor. Local wildlife corridors typically consist of vegetated landscape features such as creeks, gullies, wetlands and ridgelines, and contain habitat elements that support the species that would utilize them. They do not generally cross areas with a 76% slope, which may be considered a barrier to wildlife movement. For instance, scientists working on creating a preserved wildlife corridor between Yellowstone National Park and the Canadian Yukon (“Y2Y”) found that animals avoided areas in excess of 25% slope, such that choosing areas with less than 25% slope became a design criterion for the corridor. The slope in question is nearly three times as steep as this criterion.

The existing wildlife corridor between Ulmar Pond and the Clove Creek, which is the stream and wetland system connecting these features, will be maintained. While it is not accurate to state that wildlife would never be found utilizing the area on the 76% slope, it can be concluded that this slope would not constitute a preferred route of passage for wildlife between the two features. To further reduce potential impacts, the number of proposed houses cited by HHLT has been reduced in this area from five to three. These will be situated with substantial spacing between them, such that, in the Project Sponsor’s opinion, the movement of any wildlife that does occur in that area will not be significantly impeded. The current design also includes a much shorter cul-de-sac for these homes that, with low vehicular use, would provide little barrier to wildlife movement. The roadways in this area will also be built without curbs that might otherwise have provided a barrier to small wildlife such as amphibians. These additional modifications to the Project and the preservation of the stream/wetland wildlife corridor between Ulmar Pond and Clove Creek have been implemented to reduce impacts to wildlife movement in the area to the maximum extent practicable. In the Project Sponsor’s opinion, any impacts that may remain would not be significant.

The houses along Reserve Road were sited on the east side of the road, and the common septic on the west side. This was to take advantage of the positive soil test obtained for the septic system on the west side of the road. The project engineer investigated the possibility of

“swapping” these locations, but determined the east side was unsuitable for a subsurface disposal system due to the proximity to seeps on the adjacent slope. Additionally, the project engineer concluded that previous roadway construction activity on the east side of the road has compacted the soils, also making them unsuitable for this use in that location.

**Comment 3B.26 (HHLT):** Limited Discussion of Impact of Equestrian Facility on Wildlife: The impact of the proposed 40-horse facility on wildlife habitat is not adequately addressed, especially its impact on the corridor between the eastern slopes of the property and Ulmar Pond.

**Response 3B.26:** The Equestrian Center has been removed as an element of the proposed project.

**Comment 3B.27 (HHLT):** Proposed Remedies to Analysis Deficiencies and Mitigation of Impacts: In order to complete the analysis of significant impacts identified in the Determination of Significance by the Planning Board, and to mitigate identified impacts, we recommend these 8 actions:

Reconfigure the equestrian facility to move the horse trailer parking area, in order to widen the wildlife corridor from the eastern slopes of the property to the pond.

**Response 3B.27:** The Equestrian Center has been removed as an element of the proposed project. Homes are now proposed in this area of the project site, and as described in Response 3B.21, have been placed to allow for a sufficiently wide wildlife corridor adjacent to the stream and wetland system on the eastern slopes of the property. These are homes that were originally proposed elsewhere on the project site, and their relocation here has opened up more areas that can be preserved in their existing state. This includes removing two homes from around Ulmar Pond to increase access for wildlife.

**Comment 3B.28 (HHLT):** The DEIS also omits the presence of salamanders living on site (DEIS Page 92). However, the Conservation Analysis (Appendix C CD Page 237) clearly documents the presence of two species of salamander found by herpetologist Brandon Ruhe in his June and July 2014 site visits. Thus, it is apparent that amphibians have not been properly studied on the site. The presence of salamanders is not acknowledged in the body of the DEIS (despite the data that supports it in the Conservation Analysis in Appendix C), indicating that their habitat protection has not been considered.

**Response 3B.28:** The presence of salamanders is acknowledged in Appendix C of the DEIS. Both species observed in 2014, Northern Two-lined Salamander (*Eurycea bislineata*) and Eastern Redbacked Salamander (*Plethodon cinereus*), are common species not requiring special consideration. The presence of other less common species, while not observed, has been presumed, and was considered in designing the layout and choosing the land to be set aside under permanent preservation. All wetlands, watercourses, Ulmar Pond, and large amounts of adjacent upland will be preserved as suitable habitat to support these species.

**Comment 3B.29 (HHLT):** Lack of Study for Presence of Box and Wood Turtles: The “potential developable area” of the site is heavily developed in the proposed site plan (DEIS Figure 15). While much effort has been expended in studying Timber Rattlesnake presence on the site,

very little has been expended on the extent of the presence of Eastern Box and Wood turtles (in addition to the absence of amphibian studies) who would prefer such habitat, and are both listed as species of Special Concern in New York State. The letter from Dr. Klemens in Exhibit B states: “[...] nor efforts to ascertain the use of the so-termed “medium conservation value” central portion of the site for wood and box turtles. Such open and disturbed areas are actually very valuable for ecotonal species including both these turtles as well as a variety of snakes.”

**Response 3B.29:** The presence of box turtles was identified in the DEIS. The presence of wood turtles is presumed. While the Project Sponsor agrees that the area proposed for development could potentially be utilized by these turtles, it is not uniquely suitable as turtle habitat. The only evidence of box turtles on the project site was found in the upper elevations of the area proposed to be preserved, distant from the area proposed for development. See Response 3B.18 for further discussion. Further, with the exception of the steep slope area that must be crossed by the entrance road, none of the “medium conservation value” area will be disturbed by the proposed project.

**Comment 3B.30 (HHLT):** The DEIS also mentions on Page 107, the following about the red-shouldered hawk:

*“The New York populations have steadily declined, and the primary causes are loss of habitat, logging, agriculture, and suburban development. The raptor usually nests high in the crotch of a tree and commonly in relatively large tracts of moist woodlands almost always near open water or wetlands. These raptors tend to be secretive and avoid inhabited areas. Therefore, site development could discourage the hawk from nesting and foraging on the site.”*

Based on this language in the DEIS, current nest sites are likely to be near the pond area, which is ringed by residential properties in the proposed site plan. Other than stating that limiting tree removal to sometime prior to mid-May or after mid-August will “minimize any potential impact on a nesting red-shouldered hawk, should a nest be present” (DEIS Page 99), no sufficient actions to mitigate the impact of the houses ringing the pond are given in the DEIS.

**Response 3B.30:** See Response to Comment 3B.18. It is possible that the red-shouldered hawk may nest in the less fragmented forests east of the site. There is the probability that it hunts the open field habitats and lowlands near the pond. An individual was observed during multiple site investigations over the less fragmented forested areas in the eastern portion of the project site that is proposed for permanent preservation. The pond and a minimum of 140 feet around it, as well as bordering areas to the south and east, will also be permanently preserved, and remain available as habitat. The proposed construction window, which is designed to minimize impacts on potential bat populations, may minimize impacts to potential red-shouldered hawks that may use the project site.

**Comment 3B.31 (HHLT):** Eastern box turtles prefer bottomland forest over hillsides and ridges and evidence of them has been found on site near the wetlands (DEIS Page 89). Since they are likely to favor the “potential developable area” portion of the site (shown on DEIS Page 15) that is almost fully developed, versus the upland steep slopes, we would expect to see mitigation steps included in the DEIS to protect their habitat. However, the only mitigation proposed is to relocate them away from their preferred habitat if they are found onsite during construction (DEIS Page 99). Relocation of Eastern Box Turtles has been proven to result in increased

mortality. (See Bridget M. Donaldson, Arthur C. Echternacht "Aquatic Habitat Use Relative to Home Range and Seasonal Movement of Eastern Box Turtles (*Terrapene carolina carolina*: Emydidae) in Eastern Tennessee," *Journal of Herpetology*, 39(2), 278-284, (1 June 2005))

Box turtles have a strong sense of home range and are likely to return to the area from where they have been removed. Also, a mosaic of open field, forest and wet areas are important for the box turtle, yet no mitigation is considered for the box turtle's long-term reduced access to the pond and its fringing wetlands, nor for the loss of the open field and edge habitat proposed for development.

**Response 3B.31:** The commenter is correct regarding the potential mortality associated with relocating box turtles. The carapace of a box turtle was found on an upland hillside adjacent to a watercourse that was surveyed during a wetland delineation, within the area proposed to be preserved under a Conservation Easement. Ulmar Pond has no fringing wetlands. In the Project Sponsor's opinion, wildlife access to Ulmar Pond will not be reduced as existing access to the pond will be preserved through the establishment of a 140-foot buffer on the northern side of the pond, and all of the area to the south, which includes the stream entering and draining Ulmar Pond. The entirety of this area will be part of the land protected under a Conservation Easement. The only wetlands near the pond are associated with the watercourse feeding Ulmar Pond, and the watercourse draining Ulmar Pond, which will also be preserved under the same Conservation Easement. The watercourse next to which the turtle carapace was found is the same watercourse that eventually feeds into Ulmar Pond, but at a considerable distance downhill. The access between the two points is completely preserved under the Conservation Easement.

The elimination of wildlife habitat is an unavoidable impact of any development that takes place on raw land, and given the wide ranging use of a variety of habitat types by box turtles, some portion of its habitat may indeed be unavoidably eliminated as a result of the proposed project. However, setting aside the areas noted under a Conservation Easement constitutes the permanent preservation of known box turtle habitat, and, in the Project Sponsor's opinion, mitigates to the maximum extent possible practicable potential impacts to box turtles.

**Comment 3B.32 (HHLT):** No mitigation actions were identified for the two additional Species of Special Concern that were identified as having "suspected" presence on the property---eastern hognose snake and eastern worm snake---aside from protection of the 50+ acre forested parcel. Eastern hognose snakes feed primarily on toads (Source: University of Florida Herpetology Department, <https://www.floridamuseum.ufl.edu/herpetology/fl-snakes/list/heterodonplatirhinos/>). The American toad, which was observed on the property, breeds in "the shallow waters of ponds, ditches, lakes, marshes, and wet meadows" according to NY DEC Frogs & Toads of New York State fact sheet. Disturbance of the pond on site may reduce the eastern hognose snakes' primary food source.

As with eastern box turtles, relocation would not be a viable mitigation action for this species, as it is associated with heightened mortality and reduced ecological fitness. (Plummer, Michael V., and Nathan E. Mills. "Spatial Ecology and Survivorship of Resident and Translocated Hognose Snakes (*Heterodon Platirhinos*)."  
*Journal of Herpetology*, vol. 34, no. 4, 2000, pp. 565-575. JSTOR, [www.jstor.org/stable/1565272](http://www.jstor.org/stable/1565272)).

**Response 3B.32:** Hognose and eastern worm snakes utilize diverse habitats. There is no specific habitat that could be targeted to be preserved for either of these species. It is assumed the loss of any habitat as a result of the proposed project may constitute loss of habitat for these species. The 163-acre open space proposed to be preserved under a Conservation Easement includes Ulmar Pond, Clove Creek, all wetlands and all watercourses, as well as the adjacent upland. The habitat types being set aside, inclusive of the most important upland-wetland linkages, in the Project Sponsor's opinion, mitigates to the maximum extent practicable the potential impacts to these species and toads as their food source.

**Comment 3B.33 (HHLT):** Also, potential impacts to wood thrush, a Species of Greatest Conservation Need, were not adequately addressed. The wood thrush management guidelines cited in Appendix Q recommend giving "special consideration to sites with features that naturally maintain vertical layering and horizontal patchiness, such as hillsides, streams, and wooded wetlands." Wood thrush access to the stream and wetlands on the property are not adequately addressed, and would be essentially blocked by the proposed development. The proposed development does not adequately match the cited Figure 7 of an ideal conservation subdivision, but rather creates excessive forest edge with its current design.

**Response 3B.33:** Several species of birds were heard or observed in the forested area north-northwest of the pond where there is moderate canopy/vertical layering and a patchy shrub understory (See Wildlife Observation Table). A wood thrush was heard on May 26, 2015. It is possible that the bird was nesting on site as surveys were conducted during the nesting period, but no nest site was observed. The primary difference between the proposed plan and DEIS Figure 31 (not Figure 7) is that the presence of excessively steep slopes adjacent to Route 9 prevents the placement of proposed development closer to the highway than as shown. The proposed layout therefore executes the recommendations represented in Figure 31 to the greatest extent possible given the existing site constraints. The proposed plan as stated in the DEIS to landscape each developed site with native shrubs and trees would minimize habitat impact not only for the wood thrush but also for other species known to nest in this type of habitat. In fact, Peterson (1975) noted that the wood thrush is nesting more frequently in close proximity to housing located in wooded areas, and Bull (1997) concurs that the wood thrush has been documented nesting in localities where there are stands of shade trees and shrubbery. Installing native shrubs in the landscape would create a transition zone from forest to landscaped lots that would increase biodiversity.

**Comment 3B.34 (HHLT):** Necessary Wildlife Corridors are Blocked: In 2014 Steven Coleman, a wetlands scientist and ecologist, recommended two important wildlife corridors be protected on the property, as documented in the Conservation Analysis (see Appendix C, CD), Page 7:

*"Mr. Coleman recommends that corridors be maintained between the pond and upland to facilitate movement of wildlife through the property. He also recommends that corridors be left open to allow migration between the pond and Clove Creek."*

And in his September 2014 letter on Page 232 of the Conservation Analysis:

*"The location of the proposed development (houses around the pond, road networks and equestrian facilities) may interfere with some of the movement patterns of wood turtles and other reptile and amphibian species that may travel between the Creek wetlands and the*

*adjacent pond to the southwest, and also make the site less attractive to forest interior bird species. In particular, the east-west and south-north movement throughout the subject parcel may be restricted from the proposed layout. Provisions should be made as part of the subdivision layout to accommodate the ability of wildlife species to move freely throughout the site.*

*This is especially important to allow movement corridors between the adjacent Clove Creek wetlands and the pond in the southern portion of the parcel, and also maintaining a south to north connection along the eastern side of the parcel.”*

The corridors recommended by Mr. Coleman will be blocked or constricted in the proposed site plan. The corridor between Clove Creek and Ulmar Pond is blocked by the houses and road ringing the western side of the pond. The corridor between Ulmar Pond and the upland habitat to the east is significantly constricted by the expansive footprint of the Equestrian Facility.

Shortly after his September 2014 report, Mr. Coleman appeared to no longer be engaged on this project, but his recommendations remain a crucial mitigation finding documented in the DEIS but not reflected in the current Site Plan.

The environmental consultant hired after Mr. Coleman, Mr. Steven (*sic*) Gross, discounted this wildlife corridor in a letter to the Planning Board dated March 16, 2017 saying that *“The pathway suggested in the HHLT letter would involve crossing a prohibitively steep 76% slope, and does not represent a wildlife corridor deserving of any protective measures.”*...We note that documentation of the inability of amphibians and reptiles to traverse steep slopes does not appear to be included in the DEIS, and therefore the Coleman recommendation for changes to the site plan to preserve wildlife corridors does not appear to be contradicted in the DEIS.

**Response 3B.34:** The Project Sponsor asserts that care was taken in preserving wildlife habitat and wildlife corridors when designing the proposed project, including, as noted in Response 3B.25, taking Mr. Coleman’s recommendations into account. Mr. Coleman was working with a preliminary layout that looks very different from the currently proposed preferred plan, and significant changes have been made. The equestrian center cited by Mr. Coleman was originally proposed to be located on the western side of the project site, in much closer proximity to Clove Creek. The equestrian center was then relocated further to the east, away from Clove Creek. Since Mr. Coleman’s assessment, additional land was purchased to the east for the purpose of preserving forested land as undisturbed wildlife habitat, and providing an area for north-south movement of wildlife. The proposed residential portion of the project was previously primarily centered on a spine road located in the same alignment as the historic road through the property. Since then, the historic road, which is unpaved and vegetated with shrubs and herbaceous plants, has been placed within the proposed conservation lands, preserving not only a valuable cultural resource, but also an additional north-south wildlife connection. There was considerable bird activity recorded in the area adjacent to the historic road.

In addition, the area south and southeast of Ulmar Pond will be left in its natural state, preserving pre-existing established wildlife corridors between the pond and Clove Creek along stream corridors to the south and west, and to the braided stream/wetland system and uplands to the east. In the collective opinion of the wildlife and natural resource experts who contributed to the FEIS, while amphibians and reptiles may negotiate steep slopes, it is unlikely that wildlife,



including turtles and amphibians, would climb 120 feet of elevational difference (about equivalent to a 12-story building) on a steep 76% slope (the maximum grade allowed by Town Code for a road is 10%) as a “preferred” pathway, and this would therefore not represent a wildlife corridor needing protection. (See Response 3B.25.) The proposed plan also preserves a minimum of 140 feet around the pond in its natural state as critical wildlife habitat, and involves no stream crossings and no disturbance of wetlands or regulated wetland buffers.

**Comment 3B.35 (HHLT):** Limited Discussion of Impact of Equestrian Facility on Wildlife: The DEIS Final Scope called for a description of the impacts on wildlife, “including from the equestrian center.” (Final Scope adopted July 19, 2018 Section V.B.2.) Thus, the DEIS should have included a discussion of impacts on wildlife movement between the eastern slopes and Ulmar Pond as alluded to in the Coleman 2014 letter mentioned above (Conservation Analysis Page 232). However, the main discussion of the impact of the equestrian facility in this section of the DEIS is simply the rationale for it as a permissible use, rather than its impact on wildlife movement corridors and how that will be mitigated (DEIS Section IV.B.2.b.1 at Page 101).

**Response 3B.35:** See Response 3B.29. The Equestrian Center has been removed as an element of the proposed project.

**Comment 3B.36 (Klemens):** Compounding the difficulty of reviewing this file are that there have been many studies conducted on the site by different consultants, and the subject site has been enlarged in this process to add additional parcels of land to meet various set-aside and access requirements. This has resulted in an apparently uneven study of the entire six-parcel site, and indeed some of the studies are in conflict with one another. Nowhere is there a summary of efforts expended in biological inventory, the researcher’s hours, and the seasonality of the studies. It is well known that by missing certain seasonal activity windows, species can be overlooked. While documenting a species “presence” is quite straightforward, documenting a species “absence” is far more labor intensive. If one reviews the Federal (USFWS) Bog Turtle Recovery Plan that I wrote for the USFWS in 2001, you will note that we attempted to standardize efforts required to demonstrate an “absence” that included strict standards for person-effort per acre, number of visits, seasonal timing, and weather conditions for such studies. I bring this up only to illustrate the difficulties of concluding species absence with confidence absent a structured study that optimizes the potential for species detection by gearing sampling to coincide with the correct seasonal activity windows for the target species and provides for repeated sampling to conclude an absence.

The mere generation of piles of paper, much of it repeated in the Conservation Analysis and Environmental Assessment volumes, does not necessarily equate to due diligence on the site. What has occurred here is that studies were added in a step-wise process as additional parcels were incorporated, and by that very process has resulted in a record that is both uneven in study effort, but more seriously deficient and at times in conflict with previous studies.

**Response 3B.36:** The most recent (2015) inventory was conducted by Joan M. Hansen and Donald J. Smith on the entirety of the property, and was intended to stand alone, not to complement or add to previous inventories, with the exception of the herpetological survey by Richard “Randy” Stechert, which was also conducted on the entirety of the property that same year. As stated in the DEIS, wildlife observations and vegetation inventories were conducted during four site visits during a three-month period, May through July of 2015. The inventories

were conducted during the mid-to-late period of song bird breeding coinciding with the late spring and early summer growing season. The objectives for conducting the inventories during this period were to observe nesting and migratory species utilizing the site at a time when the growing season was well underway. The results of this inventory confirm observations in previous studies by others without conflict.

While no vernal pools were observed during these multiple inventories, one additional study of the entire parcel was conducted in the early Spring of 2019 specifically to settle the question of the presence or absence of vernal pools on the project site. This study, conducted by David Griggs, confirmed the absence of vernal pools on the property, and is attached as Appendix D. Details of this study are discussed elsewhere in these responses.

**Comment 3B.37 (Klemens):** We are provided with summaries of the work by Hudson Highlands Environmental Consulting (August 12, 2015) which is a practice I have termed “corporatized science” where the individual consultants reports are not submitted, but a summary created by a project manager. While these managers may be scientifically credentialed, what other scientists really need to be able to review the reports are the actual field data and reports of the sub-consultants, not summaries. What I would need to see are those primary data to assess whether or not sufficient effort has been expended on all six parcels to adequately assess the biodiversity. These individuals who conducted the field work need to be present at a public hearing so they can be cross-examined by interested parties. For example, Coleman subcontracted the timber rattlesnake surveys to Brandon M. Ruhe, a highly qualified herpetologist. What would be very useful to know is the species of amphibians and reptiles he found during the considerable time he spent on site. I have worked with Mr. Ruhe in the past, and I know that he keeps copious notes concerning any species of amphibian or reptile he encounters in the course of his field work. My concerns over “corporatized science” are not restricted to this project. If you examine recent public hearing transcripts of the Connecticut Siting Council (where I am a gubernatorial appointee) you will see that there have been several recent cases where I have requested that hearings be continued to allow the Council to hear direct testimony from the individuals conducting the research, not summaries crafted to fit regulatory frameworks by project managers.

**Response 3B.37:** Nothing was summarized. All the data collected and analysis prepared by Gross, Hansen, Smith, and Stechert were included in their entirety in the Conservation Analysis and the DEIS. It is the belief of HHEC that all available materials from previous studies by Coleman and Ruhe have also been provided in the appendices of the DEIS. No additional data is in the possession of the Project Sponsor.

SEQR related public hearings in New York State are intended to provide the public an opportunity to present their comments and concerns related to a proposed action and to allow the lead agency, project sponsor and those in attendance the ability to receive the public’s input. Experts may be in attendance to listen so that they can respond to expressed concerns and questions in writing subsequent to the hearing, but do not provide any kind of immediate responses or testimony, and are not subject to “cross examination”.

**Comment 3B.38 (Klemens):** My professional expertise is that of an academically-trained conservation biologist/ecologist. My research background is in herpetology, the study of amphibians and reptiles. These two groups of vertebrates make up a high percentage of

endangered, threatened, special concern, and declining species when compared to other organisms. This is in part to various constraints that are amplified by development, including poor dispersal abilities, specific habitat requirements, and in some species, primarily turtles and venomous snakes, low reproductive output. As such, these organisms are ideal to evaluate the conservation effectiveness, or lack thereof, of a proposed development. Several different individuals with herpetological expertise conducted studies on the site. But these studies in part contradict one another especially as it pertains to conservation outcomes.

Coleman calls for a large east-west corridor to be left between Clove Creek (a known habitat for the wood turtle, *Glyptemys insculpata*) and Ulmar Pond, but subsequent testimony in the record (via letters and verbal comments from the applicant's environmental consultant) states that the slope is too steep to allow passage from Clove Creek east to the project site and the need for this broad corridor is dismissed. This is complete nonsense as wood and snapping turtles have been observed climbing over chain link fencing. While not able to climb over vertical fencing like wood and snapping turtles because of their high domed shells (which have a different center of gravity than the dorsally compressed snapping and wood turtles), box turtles clamber up and down very steep talus slopes at West Rock Ridge (New Haven/Hamden CT). As far as amphibians and snakes are concerned, they navigate up and down slopes without difficulty.

**Response 3B.38:** In the 2013 "2013 Bulletin No. 41: Trap Rock Ridges of Connecticut: Natural History and Land Use" published by the Connecticut College Arboretum, Klemens' work at West Rock is cited:

*"At West Rock in New Haven, box turtles were observed crawling through talus at the edges of steep cliffs. Some of the turtles showed damage to their outer shells, presumably incurred from falls down the escarpments (Klemens, 1993)."*

It is the Project Sponsor's understanding that this citation describes box turtles crawling through talus at the edges of steep cliffs. Rather than providing evidence that "box turtles clamber up and down very steep talus slopes," the citation suggests that the turtles have difficulty with negotiating the slopes, noting evidence of falls experienced by the turtles. It is the Project Sponsor's opinion that under the noted conditions in the citation, it is possible that the turtles may find benefits from crawling into and through the spaces in talus, such as shelter from predators or use the talus slope for other factors that might not directly apply to the HHR project site. As surrounding conditions at the two sites may differ significantly, the use of the talus slope may not necessarily show preference for a 76% slope as a corridor, vs. following the more shallow grade of a stream bed that connects the Clove Creek to Ulmar Pond.

The Project Sponsor's consultants did not conclude that *"the slope is too steep to allow passage from Clove Creek east to the project site."* The Project Sponsor's position regarding wildlife use of the 76% slope is best stated in Response 3B.25 which reads, *"While it is not accurate to state that wildlife would never be found utilizing the area on the 76% slope, it can be concluded that this slope would not constitute a preferred route of passage for wildlife between the two features."*

With a conservation subdivision, the objective is to allow development to occur while avoiding environmental constraints and preserving important environmental features and wildlife habitat. One of the goals is to preserve identifiable wildlife corridors, not every place wildlife may utilize

or cross. The commenter states that “*wood and snapping turtles have been observed climbing over chain link fencing.*” This statement does not provide any context, such as what conditions existed on either side of the fence, whether the fence was newly installed, if it had been placed in a known active turtle migration route, and whether there was any alternative route. Under normal circumstances, it is extremely doubtful that turtles would *prefer* a route with a chain link fence, and neither would the turtles *prefer* a route with a 76% slope.

The Project designers have taken measures to ensure that the stream/wetland corridor feeding into Ulmar Pond from the eastern slopes and the stream/wetland corridor exiting Ulmar Pond that leads to the Clove Creek, thereby preserving a corridor as recommended by Coleman. The Project Sponsor does not believe it is necessary to avoid placing homes to the west of Ulmar Pond above the 76% west-facing slope, as this would not be a preferred wildlife corridor. It is acknowledged that wildlife may continue to utilize the forested slope in any manner as they do currently. Should an amphibian or reptile climb the slope from Clove Creek, passage between the proposed homes to Ulmar Pond is possible.

**Comment 3B.39 (Klemens):** One of the most troubling inconsistencies in the report is the statement that there are no vernal pools on the site, yet, a vernal pool indicator species, the wood frog, *Rana sylvatica*, was observed on the site on May 22, 2015. This means that somewhere, either on or off the site, a stand-alone depressional vernal pool or a vernal pool imbedded within a larger wetland (=cryptic vernal pool) exists. In 2015, the first field herpetological field visit to occurred on May 6th. This was far too late in the season to document calling wood frogs, or even detect their egg masses. This type of field work needed to occur in March through early April. Testimony provided by the Hudson Highlands Land Trust called for up to 500-foot buffers for amphibians and reptiles. Actually, in the case of vernal pools, the critical terrestrial habitat required to sustain 95% of the vernal pool amphibian population extends 750 feet from the pool’s high-water mark. While some development can be accommodated in the area between 100-750 feet from a vernal pool, it must be done in a manner consistent with the standards outlined in Calhoun and Klemens (2002) which is the “industry standard” for developments within vernal pool sheds and can be found on the Army Corps of Engineers website.

**Response 3B.39:** A vernal pool investigation was conducted by ERS Consultants on April 6, April 13, April 18, and April 23, 2019. No vernal pools were observed anywhere on the project site. No egg masses were observed within the subject property. During the same time period, however, egg masses were observed on two sites a few miles north and east of the subject site, which confirms that this was the proper breeding period to find egg masses. Other areas both on and off the project site, including the braided stream/wetland system, the NYSDEC regulated wetlands, and even Ulmar Pond itself, could have provided suitable habitat for the propagation of wood frogs. These are the likely sources of wood frogs observed on the project site. As noted in the vernal pool report, “several obligate species, such as spotted salamanders and wood frogs, breed in other wetland areas such as roadside ditches and small ponds (Calhoun & Klemens 2002).”

**Comment 3B.40 (Klemens):** Identification and mapping of vernal pool areas on and off the site is an essential missing component of the Conservation Analysis. Some potential areas that may have vernal pool functions include floodplain depressions along Clove Creek, shallow fringing areas of Ulmar Pond that are essentially free of predatory fish, or as-of-yet undetected vernal

pools in the forests, on or off site. Once pools are mapped, then the impact of the proposed layout and its consistency with Calhoun and Klemens (2002) can be determined. While there appears to have been considerable focus on the presence of timber rattlesnakes on the site, there seems to have been no concerted efforts to evaluate vernal pool activity in March and April, nor efforts to ascertain the use of the so-termed “medium conservation value” central portion of the site for wood and box turtles. Such open and disturbed areas are actually very valuable for ecotonal species including both these turtles as well as a variety of snakes.

**Response 3B.40:** No vernal pools were observed during multiple floral and faunal inventories of the project site. One additional study of the entire parcel was conducted in April of 2019 specifically to determine the presence or absence of vernal pools on the project site. This study, conducted by David Griggs of ERS Consultants, confirmed the absence of vernal pools on the property, including within the areas suggested by the commenter, and is attached as Appendix D. Details of this study are discussed elsewhere in these responses. While not considered vernal pools, and though not observed during site investigations, suitable breeding habitat for vernal pool species may be provided within areas of the braided stream/wetland system, the NYSDEC wetlands on and offsite, and fringe areas of Ulmar Pond. None of these will be disturbed.

**Comment 3B.41 (Klemens):** The Conservation Analysis and the DEIS relies upon the studies and documents that I reviewed last October. No additional studies or analyses address the issues and deficiencies that I detailed in my memorandum of October 10, 2018 to the HHLT, which is appended as Exhibit B in their submission. My academic and professional qualifications are appended as Exhibit A of HHLT's comment letter. The deficiencies that I detailed last October still remain outstanding, unresolved, and are very relevant to your evaluation of the completeness of the DEIS and its accompanying Conservation Analysis in Appendix C.

Absent addressing these issues, in my professional opinion the DEIS and its accompanying Conservation Analysis should be deemed to be incomplete by the Philipstown Planning Board and the Applicant should be directed by the Board to conduct the necessary studies and analyses to address these deficiencies.

**Response 3B.41:** As noted in the previous response, an additional vernal pool study was conducted in April of 2019, and is attached as Appendix D. It is the opinion of the Project Sponsor that the other floral and faunal studies conducted on the property are commensurate with the requirements of SEQRA, and are sufficient for lead agency review in reasonably determining the potential adverse impact of the proposed project. There will always be additional scientific studies that can be conducted on any property, but may not provide any additional analytic direction to the lead agency. As stated in SEQR at 6 NYCRR Section 617.9(b)(1), *“An EIS must assemble relevant and material facts upon which an agency's decision is to be made. It must analyze the significant adverse impacts and evaluate all reasonable alternatives. EISs must be analytical and not encyclopedic.”* This language is mirrored in the fourth edition of The SEQR Handbook, dated 2020, which states on page 98, *“EISs should be analytical, concise, and not encyclopedic. Lead agencies are looking for quality analyses, clear writing, and comprehensive information. EISs should not contain more detail than is necessary to address the nature and magnitude of the proposed action and the significance of its potential impacts.”*

**Comment 3B.42 (Audubon):** In the DEIS, "Wildlife Sightings" and "Existing Conditions" are included with four field date visits on May 6 & 26, July 9 and August 1, 2015. Four field visits is simply too short a time span to conduct meaningful monitoring of birds. The absence of breeding bird surveys and counts for birds to determine they are not nesting have been omitted, or not done. Bird species breed at different times during the year. Owls breed in winter, Hawks and Eagles breed in Spring through the Summer months and it takes vigorous monitoring and surveying to find their nest sites. Migrating warbler species and forest birds that breed here during the late Spring and Summer would also have been largely missed by the short visit dates.

**Response 3B.42:** As noted in the previous response, EISs are not intended to be encyclopedic. The SEQR Handbook as revised in 2020 states, "*EISs should be analytical, concise, and not encyclopedic. Lead agencies are looking for quality analyses, clear writing and comprehensive information. EISs should not contain more detail than is necessary to address the nature and magnitude of the proposed action and the significance of its potential impacts.*"

In regard to wildlife and wildlife habitat, the Scoping Document required:

- "a) Describe existing conditions of vegetation associations and wildlife habitat, including extent of forest fragmentation.*
- b) Describe presence or absence of protected species"*

The Project Sponsor believes that the analysis provided in the DEIS satisfies the requirements of the Scoping Document. There was no requirement to conduct breeding bird surveys or to locate nests. In addition, the design of the proposed conservation subdivision minimizes the removal of trees, and sets aside and preserves undisturbed the most valuable wildlife habitat to continue to support the existing bird population that currently uses the area to be protected. As such, no significant impact is anticipated on the noted bird species.

**Comment 3B.43 (Audubon):** Forest bird species have been a special concern to Audubon as their numbers have been dropping. Loss of habitat, fragmentation of forest habitat, as well as climate change are causing these species to decline. Any additional stressors can spell real trouble for these species.

**Response 3B.43:** See response to Comment 3B.18.

Climate change, forest fragmentation, increased use of pesticides and in many areas an increasing deer population, have had serious impacts on both bird life and plant communities. As has been stated, 163 acres of forested land will be set aside with a Conservation Easement. Within the area of disturbance, the removal of vegetation will be somewhat mitigated by installing native trees and shrubs. It is anticipated that the additional native trees and shrubs will provide food and habitat for native year-round and migratory bird species, increase the areal coverage of native vegetation, and may increase the diversity of the local plant communities.

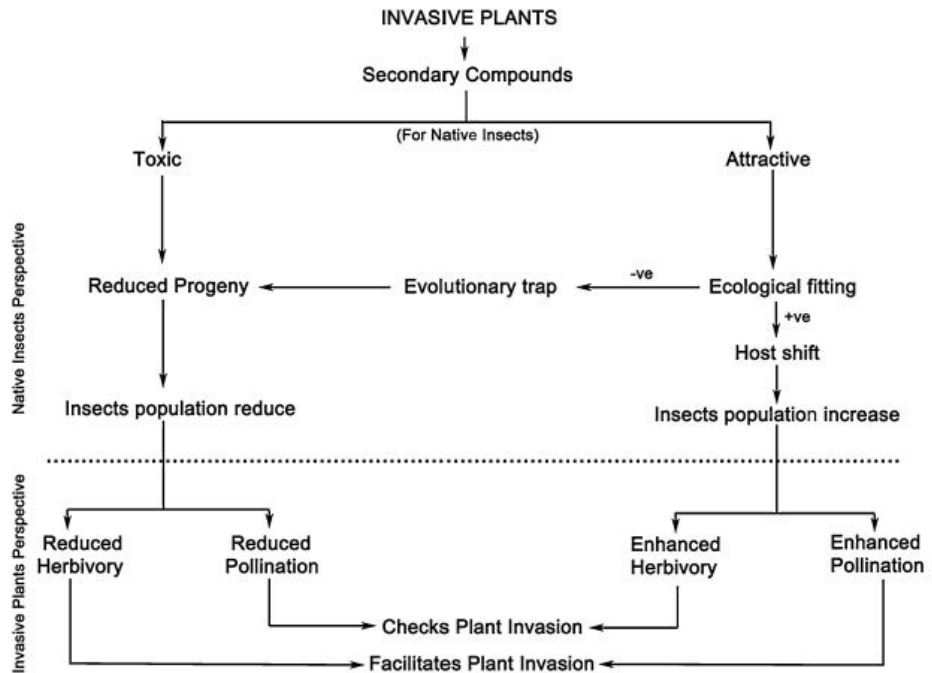
Planting healthy native trees and shrubs may increase the amount and quality of understory by adding healthy native individuals in areas that, prior to the development, were home to invasive species. Replacing invasive species with natives will increase the coverage of local plant communities. The additional native plantings will likely interbreed with any standing individuals

of the same species infusing the resultant population with genes from other populations increasing the available gene pool.

Plant species diversity consists of two components – richness and evenness. (Discussions of plant species diversity are available in *Ecology and Field Biology* by Smith and Smith (2000) or *Ecology from Individuals to Ecosystems* by Begon, Townsend and Harper (2021) or *Ecology* by Krebs (2008).) Richness is the number of species present in a given area while evenness is a measure of how evenly distributed a species is within that community. If the number of individuals in each species is more similar, it is said to have greater evenness. There are several commonly used diversity indexes which quantitatively measure the number of different species and how evenly the individuals are distributed among the species. Generally, areas with more species and greater evenness have higher diversity indices. By planting additional native trees and shrubs the diversity could increase in several ways. If the additional plants are species that are not now present on the property the species richness would increase; if the additional plants increase the relative abundance of low abundance species, the evenness would increase. This is a way that plant diversity would increase. As plant diversity increases, habitat diversity increases as plants provide habitat, for birds and their prey species in particular.

Invasive and non-native plants can be sinks for native insects, for example if the insects lay eggs on plants which cannot sustain their offspring. Sunny et al. (2015) describe some native insect and invasive plant interactions in their paper whose figure 1 is reproduced below.

**Fig. 1** Diagram illustrating interactions between native insects and invasive plants from both native insects perspective and invasive plants perspective (+ve indicates positive performance and -ve indicates negative performance of native insects on invasive plants, dotted line separates native insects perspective and invasive plants perspective for easy understanding)



By increasing the native plant cover and reducing invasive plant cover, there will be more habitat for native insects. Many native insects are a food source for year-round and migratory

bird species that use the forests of New York. Therefore, a positive change in insect populations that would benefit birds is expected.

Additionally, the Project Sponsor expects that by establishing a HOA to enforce guidelines to manage/oversee environmental conditions, site biodiversity after project construction would be maintained.

**Comment 3B.44 (Audubon):** The Warblers migrate thousands of miles back north to their breeding grounds in the Hudson Valley from South and Central America, Mexico and southern U.S. They do this because the long daylight hours provide them with the time needed to feed and raise their young nestlings. The Hudson Valley and the Hudson River act as migration corridors for birds that stop here to breed, and those that stop to feed up, before continuing up to the northern boreal forests. The plant community in our town supports the insects that these birds need to sustain them on their migrations.

**Response 3B.44:** See Response 3B.43.

**Comment 3B.45 (Audubon):** There is no mention of audio monitoring for the presence of bat species so this component of wildlife sightings is missing as well.

**Response 3B.45:** Presence of Indiana and northern long-eared bat is presumed. The time window prescribed by the NYSDEC for the removal of trees will be observed to ensure roost trees will not be removed during periods of potential occupation. Tree clearing will be limited to the period starting on November 1 to March 31, the tree clearing window for Northern Long Eared Bats, in accordance with these guidelines. This also falls within the tree clearing window for the Indiana Bat, which runs from October 1 to March 31.

**Comment 3B.46 (Audubon):** There is also no mention of monitoring for New England Cottontails which are known to breed on the ridge. They are also on the NY State "Species of Special Concern" list.

**Response 3B.46:** Locally, the "ridge" refers to a feature immediately east of the project site. A small portion of what is considered the ridge may occupy part of the project site immediately adjacent to East Mountain Road South in the area that is being preserved under a Conservation Easement. There is no evidence of a population of New England Cottontails, breeding or otherwise, anywhere on the project site, including within the proposed Conservation Easement Area. None were observed on the site during any inventories. New England Cottontails are listed as a species of "Special Concern" in New York State. While the project site is within the area generally designated as containing "Rare Plants and Animals" on the NYSDEC Environmental Resource Mapper, it is *not* included within the more specific area designated as "Known Important Areas for Rare Terrestrial Animals" on the NYSDEC Hudson Valley Natural Resource Mapper. As seen in Figures 12A and 12B on pages 123 and 124, no part of the HHR property is occupied by a Significant Natural Community as designated on the NYSDEC Environmental Resource Mapper, but portions of the property are within a buffer, or the "vicinity of a Significant Natural Community", including the proposed conserved area near the ridge (<https://gisservices.dec.ny.gov/gis/erm/>). The US Fish and Wildlife IPaC mapper suggests that the protected Northern Long Eared and Indiana Bats utilize the property, as well as bog turtles (although it is known that bog turtles are not present). New England Cottontails are not listed as



a potential protected species on the property. NYS Natural Heritage Program was also contacted, and noted that the closest occurrence of New England Cottontails is about one mile from the project site.

New England Cottontails are very difficult to identify in the field. Currently, NYSDEC is conducting a New England Cottontail Survey which requests rabbit hunters in Wildlife Management Units in sections of southeastern counties, including Putnam County, to submit harvested rabbit skulls to the DEC. The skulls will be used for identification to help determine the distribution of the New England Cottontail. NYSDEC can be contacted for information about a survey. Reference: <https://www.dec.ny.gov/animals/67017.html>

**Comment 3B.47 (Audubon):** The project has been designed with houses forming a half circle around the pond which means that wildlife use will be limited or become non-existent. Building houses near the pond means that lawns, ornamental shrubs and decorative plantings will replace the native plant species that form a pond community that supports pond species. Chemicals used to support the lawns and ornamentals will find its way into the pond and disrupt the natural processes of ponds and the wildlife they support. Has the Town studied the wetland delineation infield?

**Response 3B.47:** The wetland delineation was reviewed and confirmed by the Town on June 13, 2017. The delineation of NYSDEC-regulated wetlands on and adjacent to the project site was reviewed and confirmed by the NYSDEC on March 25, 2016. As no federal wetlands would be disturbed under the proposed project, coordination with the Army Corps was not required. A 140-foot buffer of existing natural vegetation will be maintained undisturbed, providing important wildlife habitat. As previously noted, those areas around the pond that serve to receive and discharge flow, and provide for wildlife corridors, will also be preserved in their natural state. As shown on the current plans, the homes themselves will be situated between 171 and 277 feet from the edge of the pond, and at an elevation of between 30 and 50 feet above the pond. Given all these factors, the Project Sponsor's consultants believe that wildlife use of the pond can be expected to continue unabated. The DEIS, (pgs. 38-39), presents management and conservation plans for the site, which will provide further protection to the pond. Buyers will be required to join the Homeowners Association and adhere to the rules of the association concerning maintenance of the proposed Conservation Area, as well as restrictions on the use of pesticides and herbicides.

**Comment 3B.48 (Imrey):** I live at 62 Horton Road. I've been there for 18 years. I would like to ask my question first since I might run out of time, and I'll describe the reasons later. I would like to understand whether or not it's possible to have a proper set of accountability and responsibility for any type of environmental project going forward in Philipstown. And the reason I'm asking is that Glasbury Court was put into my neighborhood in 2009 with a lot of opposition from our area. Neighbors collected together to oppose it, and it's been put in as a conservation. However, when I first got to my home in 2001, I couldn't even step into Clove Creek without being nibbled by trout. There were turtles everywhere. There were bats in the sky at night. There were so many night noises that we would be woken up. And I have to say it's sad to report that the natural habitat in my home, 62 Horton Road, right across the street from this development, is so depleted in the last 18 years.

I've been calling the Department of Environmental Conservation to ask for somebody to come and make a report. I've gotten a permit to stock my stream with trout, because I'm so disturbed at how few there are. I would like to ask the planning commission to please do a follow-up report for Glasbury Court on the environmental impact that's been done in our area already. I'm downstream. I'm really worried about this -- this project for the same reasons that we can't really necessary measure. Glasbury Court was supposed to be fine. Turns out, it might not be fine. So I'd like to ask the planning board to, please, consider a rigorous accountability for any agreed proposal for the properties.

**Response 3B.48:** At 90 residential units on 80 acres (1.125 units/acre), Glasbury Court is nearly ten times the density proposed for Hudson Highlands Reserve's 24 residential units on 210 acres (0.11 units/acre). It is a vastly more intensive development project, and undoubtedly resulted in a far greater environmental impact than would occur with the proposed project. However, it is difficult to directly link the observed changes to any one cause, or a particular development. The reduction of the bat population in the time period described, for instance, is not due to the development of Glasbury Court, but due to the emergence of White Nose Syndrome, a fungus that has wiped out more than 90% of local populations of some bat species. The reduction of the trout and turtle populations, likewise, may be the result of global warming, rather than any particular development project.

Going forward, more innovative development designs are needed to preserve large blocks of wildlife habitat and corridors, retain trees to shade and keep cool water bodies and streams supporting fish and amphibians, and provide sufficient treatment for runoff and wastewater. This cluster proposal has been designed with all of that in mind. The environment should be a critical component of any development plan. It is the best way to permit development while conserving as much land as possible in a natural state in order to minimize adverse environmental impacts.

**Comment 3B.49 (Ford):** I also think about how the horses will impact the wildlife. Are they going to be scared off?

**Response 3B.49:** The Equestrian Center has been removed as an element of the proposed project.

**Comment 3B.50 (Chester):** Ulmar Pond: It appears there is going to be some wall around the pond, animals have been coming to this pond for years. If this was a conservation subdivision, why aren't those animals being protected? The area around the houses, including the backyards that back up to the pond, will that be all green fertilized grass as in Glassbury Court?

**Response 3B.50:** The proposed "wall" referenced in the DEIS is a low marker defining the boundary between the proposed residential properties and the buffer surrounding Ulmar Pond. As described on page 42 of the DEIS, *"The residential property line in this area will be demarcated by a low stone boundary marker using indigenous fieldstone, similar to 'farmer's walls' already found elsewhere on the property. Homeowners will be prohibited from utilizing the neighboring preserved open space beyond the boundary marker for any purposes other than passive recreation. This prohibition includes the deposition of grass clippings and brush."* As with the "farmer's walls", the wall will be less than 2 feet high and about 3 feet wide at the base with occasional barways (spaces). It will not be mortared. The wall is not intended keep

small animals from entering the residential lots or taking advantage of the voids in the wall, and, in the Project Sponsor's opinion, is not anticipated to impede wildlife movement or result in significant change in wildlife access to Ulmar Pond. It is intended to make certain that homeowners are aware of the location of their property lines and that the area on the pond side of the wall is to be respected and protected. In the area where homes, roads, and other development is proposed outside of the 140 foot buffer around the pond, the existing natural habitat will be altered and in some areas eliminated.

The Project Sponsor intends to limit tree removal to the greatest extent possible, and build the homes in a natural setting. HOA rules will limit each home to a maximum of 2,000 square feet of lawn. The use of fertilizer will also be strictly limited by rules adopted by the HOA.

**Comment 3B.51 (Tashjian):** I am a 19 year full-time resident of Philipstown, I live on Esselborne Road. I want to voice additional concerns regarding this development and the impact it will have on my life and the many woodland birds and mammals that also call it home.

Just this morning I identified a wild bird that I hear presently outside my window. It is called a Wood Thrush. It has the most beautiful flute-like call you can imagine. As I sat this morning with my cup of tea, I was able to finally see this bird singing! They are illusive and hard to spot, but their beautiful song will remain with you. This beautiful bird is a threatened species due to loss of habitat. When tracts of forests are broken up, birds like the Wood Thrush suffer.

The proposed development project would harm this beautiful bird that is already a threatened species. It breaks my heart to think that harm might come its way.

**Response 3B.51:** While populations have declined, the wood thrush is not an endangered or threatened species. A wood thrush was heard on the project site during a wildlife inventory conducted on May 26, 2015. It is possible that the bird was nesting on site since surveys were conducted during the nesting period, however, no nest site was observed. The proposed plan would add landscaping with native shrubs and trees that would minimize habitat impact, not only for the wood thrush but also for other species known to nest in this type of habitat. In fact, Peterson (1975) noted that the wood thrush is nesting more frequently in close proximity to housing located in wooded areas, and Bull (1997) concurs that the wood thrush has been documented nesting in localities where there are stands of shade trees and shrubbery. Installing native shrubs in the landscape would create a transition zone from forest to landscaped lots that would increase biodiversity.

**Comment 3B.52 (Hammond):** The HHR continues to insist that leaving a proper wildlife corridor or building true clustered housing - as is recommended by sound conservation subdivision planning - wouldn't work for their bottom line. It makes much of leaving a 130-foot buffer between building lots and the pond, which is more than legally required, when the gold standard is 100 METERS, almost 3 times the amount of space proposed by HHR (328 feet.)

**Response 3B.52:** The proposed plan is a clustered layout and preserves large areas that currently function as wildlife corridors. The current plan for HHR has been modified to propose 24 residential lots with houses, 22 of which would be new construction and 2 of which have existing homes, and no equestrian center. The homes will be clustered on the western and southern areas of the property. The eastern side of the property will be preserved in its entirety,

as will also interconnected large segments in the northern, southern, and western portions. These preserved areas will provide several opportunities for wildlife corridors, including to and from Ulmar Pond. As the largest preserved area is on the eastern side of the property, wildlife coming from or moving toward Fahnestock State Park will be especially well-served. HHR has also removed two proposed homes from the southern side of Ulmar Pond leaving a natural connection between preserved areas that did not exist under the original plans.

The bulk of the proposed conservation area is on the east side of the property furthest from Albany Post Road (Route 9). The planned housing is concentrated on the west side of the property. As noted in the DEIS:

*The concept of unfragmented forests is one that has gained more and more attention in recent years. Unfragmented forests are very large tracts of land, typically thousands of acres, that are far removed (>1000 meters) from roadways and developed edges, and are dominated by native plants and capable of supporting interior forest wildlife species. Technically, none of the project site, which is surrounded on all sides by roadway, qualifies as truly unfragmented forest. However, that portion of the on-site forest farthest to the east, which is dominated by native vegetation and lies closest to unfragmented forest in Fahnestock State Park, does provide some of the functions associated with unfragmented forests, and its preservation will enhance and protect the functions of the unfragmented forest in Fahnestock. The portion of the project site closest to Route 9 and neighboring residential development is already considered especially impacted, both by its proximity to these features, as well as by existing site disturbances including occupied structures, roadways, cleared areas, and vegetated areas that are heavily compromised by exotic invasive species.*

The second part of the comment addresses the building lots near the pond. As noted above, there are currently five proposed residences surrounding the pond and one existing structure. There will be three proposed residences to the northwest of Ulmar pond on Ulmar Pond Drive and two proposed residences on the east side of the pond where there is also one existing residence.

It should be noted that the plan has been for HHR to improve the ecological state of the pond through management. The pond currently has frequent large algal blooms. Algal blooms are an ecological problem for several reasons. The live or dead algal cells may suffocate fish by clogging or irritating the gills. The algal blooms can disrupt water clarity, stunting or killing bottom plants. When algal cells die, they decay. The decay process uses oxygen which can lower the oxygen levels in the water leading to the distress or death of oxygen-dependent creatures including fish. This rapid depletion of oxygen is called eutrophication. Additionally, some algae known to be common in the Hudson Valley are toxic for at least part of their life cycle. This includes a blue-green algae (*Anabaena* sp.) identified during sampling of Ulmar Pond. Some harmful algal blooms (HABs) of toxic algae have the potential to release a fast-acting nerve toxin that is dangerous to fish, waterfowl, and mammals. Other toxins target the liver inducing nausea, vomiting, or acute liver failure. Freshwater algal blooms most commonly occur in still waters with excess nutrients such as phosphorus and nitrogen which would normally limit aquatic plant growth. Phosphorus and nitrogen are present in high amounts in fertilizer and also in septic systems.

HHR plans to improve the state of the pond in several ways. There is currently a house with a septic system on the banks of the pond. That septic system will be abandoned. HHR's plan is to have all homes in the development share a common sanitary disposal system which will be at least 400 feet from the pond. This movement of the disposal of effluent at the pond's edge to a point farther away will benefit the pond by eliminating any groundwater nutrient flow from the current septic system to the pond. HHR also has a plan for pond management which would be continued by the HOA including using algaecides to treat the pond. Some protozoa, bacteria, fungi, and amphibians can also be used for biological control of some algae species. Management will increase the health of the pond. Other proven methods that will be employed to decrease nutrient loading include maintaining or restoring native plants around shorelines. Native wetland plants filter water and absorb nutrients. These plants will also serve to control erosion that can carry nutrient-rich soil into water bodies. The distance of a structure to water is not as important to the water quality as the quality of the buffer between the structures and the water body.

As noted in the DEIS, the lots surrounding the pond will not be introducing effluent into the ground immediately surrounding the pond as their sewage will be transported by a central sewerage system to a common disposal field that is removed from the pond. The use of pesticides and fertilizers will be strictly limited and enforced by the HOA. There will be a low stone boundary wall at the rear of the property line of the homes located above the pond to demarcate the edge of a 140-foot preserved buffer of existing, well-established natural vegetation, all of which will provide filtration and treatment. The closest proposed home will be approximately 200 feet from the pond, with the others being as much as 285 feet away.

**Comment 3B.53 (Hammond):** Preservation of bat roosting sites. The argument that bats move from tree to tree on a nightly basis and thus taking down trees in which they may roost will have no effect on bat population makes no sense. If you take down trees, there will be an effect, regardless of whether it is the colony's only roosting site, or one of several.

**Response 3B.53:** The threat to Northern Long Eared bat populations is not associated with the reduction of summer habitat. As stated by the USFWS, "*Northern long-eared bat summer habitat is not limited or in short supply and summer habitat loss is not a range-wide threat to the species.*" When the Indiana bat was placed on the endangered species list, the primary threat was human intervention and manipulation of the caves used for the winter hibernacula. According to the US Fish and Wildlife Service, the primary threat today is white nose syndrome, a fungal infection that has resulted in an approximately 72% reduction in the species population. The guidelines regarding tree removal are intended to avoid direct impacts to bats that may be present in summer roost trees as they are being removed. This is why the guidelines limit tree removal to the time period that bats would be in winter hibernation. Tree clearing will be limited to the period between November 1 and March 31 in accordance with the guidelines to avoid impacts to Northern Long Eared Bats. This also falls within the tree clearing window for Indiana Bat, which runs from October 1 to March 31.

### **B.3.Forest Fragmentation Impacts**

**Comment 3B.54 (AKRF):** Forest fragmentation is too narrowly defined in the DEIS. (p.94-99). Considering the project site alone, which is the only scale of analysis presented in the DEIS, the

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proposed site plan does not bifurcate the project site itself but instead reduces it in size by developing its western and central portions, leaving the easternmost parcel undeveloped.

While this would not fully divide the project site into two or more non-contiguous fragments (the DEIS's definition of fragmentation) it substantially reduces the amount of closed-canopy forest on the project site and furthers habitat fragmentation at the local and regional scales. We encourage the applicant to look more broadly at the definition of forest fragmentation, at the parcel-scale, site-scale, local-scale and regional-scale, and its adverse effects. The project site is part of a larger comparatively contiguous closed canopy forest that spans the boundaries of the site.

**Response 3B.54:** The Project Sponsor believes that the analysis in the DEIS was completed appropriately on a landscape scale. The proposed development of the property would reduce the closed-canopy forest on the project site resulting in habitat loss. With this development, there will be an increase in edge habitat on the property over the current condition with no development. This edge habitat will extend farther from Route 9 after the development than before the development. Potential impacts associated with increased edge habitat include the potential for increased mammalian and avian predators (Smith and Smith, 2001). Refer to Response 3B.55 for additional information on predation.

How the addition of edge habitat was minimized by the development plan is addressed below. Sharon Collinge, in her book "Ecology of Fragmented Landscapes" gives a thorough and scientifically accepted description of differences between habitat loss and fragmentation. Both loss and fragmentation processes of landscape habitat change generally have negative effects on overall landscapes for wildlife and native plants. The mechanisms are often different and thus scientists make a distinction between fragmentation and loss. Some species are more responsive to spatial configuration than others. Some species thrive in edge habitat while others avoid edge habitat. The definition of edge varies with species.

Based on input through the SEQR process, the proposed project design presented in the DEIS was refined to minimize the adverse impacts of development and maximize beneficial measures such as the improvement in the quality of Ulmar Pond, and the removal of invasive species and planting native species. Given the concerns raised during the review of the DEIS, the Project Sponsor further refined the project design to reduce the extent of development, the associated limit of disturbance, the number and location of structures, and the area of impervious surfaces.. Out of the total 210.1 acre property, 38.1 acres will be disturbed during the construction of the project; 33.9 acres will be disturbed outside of the Conservation Area and 4.2 acres will be disturbed within the Conservation Area. This disturbance in the Conservation Area is necessary to fill the reserve common septic area and to build retaining walls along the entrance road and minor grading along the road system.

The completed project will be covered with approximately 7.7 acres of impervious surface. Of this, about one acre is pre-existing, most of which can be attributed to the existing commercial building and parking lot. Approximately 6.7 acres (3.2% of the property) of new impervious surfaces will be created as a result of the proposed project, all of it outside the proposed conservation area. This is a 3.4 acre (30.6%) reduction in impervious surfaces from the 11.1 acres in the DEIS Plan. The other 30.4 acres that are disturbed will be converted from natural

vegetation to landscaping, roadside meadows, or post construction stormwater practices such as bioretention areas or dry swales.

Much of the forest canopy will remain intact. As noted in the HOA regulations, *“Trees are an integral part of the overall image and character of Hudson Highlands Reserve and must be protected. Trees located on Residential Lots, open lands, and other natural areas may not be disturbed or removed without prior specific approval for each tree. Trees identified and tagged to be significant (trees that are 18 inches diameter at breast height (dbh) or larger) will remain.”* Further, the landscaping will be comprised of plants native to the area which should provide habitat for native fauna.

Nearly 78 percent of the property (163 acres out of 210.1 acres) will be preserved in a natural state through a Conservation Easement. Of the 47.1 acres not contained within the conservation area, 31.9 acres will constitute the 24 residential lots and the existing commercial parcel. The remaining 15.2 acres include the rights-of-way, stormwater practices and the primary common sanitary disposal field. The conserved areas are connected with each other within the HHR property, as well as through the Clove Creek streambed, floodplain, and riparian area on the edge of the property.

The houses are clustered on the western portion of the property, and on the previously disturbed areas in the southern portion of the property at the end of Horton Road. In addition to ecologically significant areas that are preserved, the historic road was selected for preservation due to its cultural significance. Most of the previously proposed cul-de-sac and homes in the center of the property have been removed, reducing the level of forest perforation that was associated with the DEIS plan (see Response 3B.71 for additional information on forest perforation). The preservation of this road will also provide a north-south corridor for wildlife use. The remainder of the preserved area is the most ecologically intact and has the least invasive species, or is the most sensitive to erosion if disturbed because of steep slopes.

The Project Sponsor believes that the landscape scale at which the fragmentation risk was analyzed is appropriate. Scientists concur that if land is to be developed, choosing areas closest to existing development and, in particular, closest to busy roads which already fragment the landscape will have the least detrimental effect on most flora and fauna. While habitat area will be unavoidably reduced, on a landscape scale, the portions of the HHR property which would be converted from habitat to impervious or landscaped surfaces have low to mid fragmentation risk. Interior species are unlikely to be using these portions of the property due to their proximity to roads and adjacent development.

As all of the various parcels are now under the same ownership, and all parcels will be combined under one homeowners covenant and managed in the same manner, it is the Project Sponsor's opinion that there is no longer the need for assessment at the parcel scale.

**Comment 3B.55 (AKRF):** The project site is part of the Hudson Highlands ecotone, comprised of substantially contiguous blocks of forest through which local roads, trails, and scattered development occurs. With development, the project site becomes a smaller "fragment" in this regional forest. With each development/encroachment/reduction of the blocks that make up this regional forest, the potential spread of invasive plants and animals increases in the remaining (unaffected) forested land. This is true for the proposed project, by bringing development closer

to the eastern portions of the site the remaining forested land will be reduced in size and what is left will be unbuffered to the west. The remaining forested land will not serve the same ecosystem services to the same extent that it does at present, including the likelihood that this remaining forest will provide viable habitat for increasingly rare plants/animals that require larger tracts of land to thrive. To the contrary, the DEIS suggests that development of the western half of the site will have minimal effects on the remaining forest. The proposed development will expand the area of indirect impacts (nest parasitism, pet predation, invasive plant colonization, light and noise impacts, etc.) that the DEIS indicates occurs on portions of the western-half of the site by Route 9 at present, further eastwards into less-disturbed forest. Suggestions in the DEIS that adverse effects to the 90% closed-canopy forest that occupies the site will be minimal are unsupported — at p. 104: "New development on land adjacent or close to existing development has very limited impact as the habitat of these areas is already significantly impacted by existing adjacent or nearby development." And at p. 96: "In addition, the forested area proposed for development is already impacted by the "fragmenting effect" of the noise from nearby Route 9, which has been found by researchers to extend anywhere from 250 meters to 1000 meters due to road noise." These statements are inaccurate. The applicant cannot contend that only portions of the site reduced in value due to proximity to Route 9 and historic homesteads will be affected and yet ignore the spread of "compromised" habitat that will result from the proposed new development. The DEIS concedes this point elsewhere, at page 96: "The proposed development will have the impact of extending the fragmenting effect farther in the direction of the unfragmented forest." We agree with this statement.

**Response 3B.55:** Though development decreases natural areas unless constructing on already developed property, the Project Sponsor believes that HHR has designed the project specifically to minimize both direct and indirect impacts to the natural environment.

- Nest parasitism is often increased along forest edges where a forest canopy meets an open area and where new development introduces pets into an area. The design of HHR strives to maintain a forest canopy over as much of the disturbed area as possible. The forest canopy will be maintained by keeping the largest trees standing. "Edge effect may increase species diversity, but it can also create ecological problems. Edges, especially abrupt ones, attract mammalian and avian predators." (Smith and Smith, 2001) The edge introduced by the HHR development will not be abrupt. However since some nest parasitism is related to a lack of forest canopy, keeping the canopy trees (the largest ones), may mitigate some of the otherwise possible increase in nest parasitism. It is possible that nest parasitism will increase even with the maintenance of the canopy to the extent possible.
- A main source of invasive plants is deliberate planting of these species in yards and gardens. Beaury et al. (2021 <https://doi.org/10.1002/fee.2392>) discuss in *Frontiers in Ecology and the Environment* how the sale of ornamental plants is a primary pathway of invasive plant introduction; 61% of 1285 plant species identified as invasive remain available through the plant trade. The chance of invasive plant colonization should not rise with the HHR development as HHR stipulates that in the landscaping process only native plants will be used and the HOA will also stipulate that only native plants will be allowed on the homeowners and common property. HHR will also remove invasive plants in the site development process. Though inadvertent introduction of invasives is possible if invasive seeds are brought to the property during construction, HHR is taking care to minimize this possibility, such as specifying the use of strawbales over haybales,

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which, in the Project Sponsor's opinion, will reduce the potential spread of invasive species. The percent of invasive plant cover is expected to decline with the invasive species management measures documented in Response 3B.8.

- HHR has attempted to minimize any light and noise impacts of development by restricting lighting to downward-directed exterior lighting sources of low lumen intensity and by using high quality insulation and windows to keep noise inside. Homeowners may spend time outside generating temporary noise, which is unavoidable and in the Project Sponsor's opinion, would not be significant. In addition to any stipulations on noise enforced by the HOA, the Town's noise ordinance would be enforceable by the Town.

Pet predation can impact native species, predation by felines being the most prevalent. An article in Nature Communications (Loss et al. 2013) states the results of a systematic review and quantitative estimate of the mortality caused by cats in the United States. The authors estimate "that free-ranging domestic cats kill 1.3-4.0 billion birds and 6.3-22.3 billion mammals annually. Un-owned cats, as opposed to owned pets, cause the majority of this mortality. Our findings suggest that free-ranging cats cause substantially greater wildlife mortality than previously thought and are likely the single greatest source of anthropogenic mortality for US birds and mammals." "Projects to manage free-ranging cats, such as Trap-Neuter-Return colonies, are potentially harmful to wildlife populations, but are implemented across the United States without widespread public knowledge, consideration of scientific evidence or the environmental review processes typically required for actions with harmful environmental consequences" (Loss et al., 2013). While it is hoped that homeowners will comply with the Humane Society's suggestion of keeping cats indoors unless on a leash, it is possible that future residents of the Proposed Project would bring a pet cat(s), which, if allowed outside without a leash, is likely to result in an increase in predation of bird and mammals in the area. The Project Sponsor notes that cats from neighboring properties would continue to cause predation, as the HHR property is surrounded on all sides by residential and commercial development. This may be best addressed by the Town of Philipstown or Putnam County regulation directing all cats to be kept indoors or leashed. As cats travel, any regulation regarding cat movement would need to cover a larger geographic area than just the HHR property, otherwise cats from neighboring properties would continue to cause predation, as the HHR property is surrounded on all sides by residential and commercial development.

As noted above, however, it is unavoidable that any development in a natural environment will compromise wildlife habitat. HHR will decrease habitat. HHR will increase the impervious surface of the property by approximately 6.7 acres (3.2% of the property) and convert an additional 30.4 acres (14.5% of the property) from natural vegetation to landscaping, roadside meadows, or post construction stormwater practices. The landscaping will use native plants.

Importantly, with the development of HHR comes the permanent conservation of 163 acres of the highest value forested area of the property (77.6% of the total property). Without the HHR development, those areas would all be open to future development; with the HHR development, those areas will be conserved in perpetuity.

It is acknowledged that with each development/encroachment/reduction of the blocks that make up this regional forest, the potential spread of invasive plants and animals increases in the remaining (unaffected) forested land. To help offset these impacts, through a Conservation

Easement, the proposed project will permanently arrest the possibility of any further development in this block of forest, which includes approximately 50 acres that was purchased by the Project Sponsor specifically for the purpose of preserving it.

**Comment 3B.56 (AKRF):** To illustrate the importance of scale to the question of forest fragmentation: Of the six tax parcels that comprise the project site, the proposed site plan largely develops or bifurcates five of them, with only the final parcel acquired by the project sponsor remaining undeveloped, lot #17.-1-76.111. Thus, considered at the "parcel scale", the proposed site plan causes substantial fragmentation. At the local scale, considering the project site's relationship to immediately adjacent parcels, surrounding land is largely forested with only local roads and scattered low-density development to the north and east. The proposed project will widen the suburban land use cover type along Route 9 substantially, furthering the reduction in the block of local-scale largely contiguous forest that extends from the project site eastwards into these adjacent forested lands, including Fahnestock State Park. Finally, at the regional scale, the proposed project will reduce the finite acreage of undeveloped forested habitat that comprises the Hudson Highlands ecozone. The DEIS focuses on fragmentation at the project-site scale, but must also consider the bigger picture. This is not to say that the project site must remain undeveloped. Rather, the lead agency must consider these adverse effects from forest fragmentation which have not been presented fully/at all appropriate scales in the DEIS.

**Response 3B.56:** The parcel scale analysis is addressed in Response 3B.54, and is based on all parcels held by the Project Sponsor as a single parcel; individual "tax parcels" that comprise the property are not considered separately. Four of the six parcels are a re-assemblage of much of the Ulmar Farm, which was whole as recently as 1985.

At a local level, the commenter asserts that *"(t)he proposed project will widen the suburban land use cover type along Route 9 substantially, furthering the reduction in the block of local-scale largely contiguous forest that extends from the project site eastwards into these adjacent forested lands, including Fahnestock State Park."* The proposed project will add low-density development (22 new residences clustered together on a 210 acre parcel) but, in the Project Sponsor's opinion, this does not constitute a substantial increase in suburban land use given the surrounding land is currently fragmented by roads and development. While the proposed project will increase this level of existing fragmentation, the type and scale considered is consistent with existing development along Route 9. The east side of route 9 to the south of the project site includes a dense suburban development, Glassbury Court at Cold Spring, and a less dense suburban area off Horton Road. To the north of the property is a suburban area off East Mountain Road North. Adjacent residential uses on both Horton Road and East Mountain Road extend out approximately the same distance from route 9 as what is proposed by the Project Sponsor. Several commercial properties including several retail stores, a Concrete Products center and a Landscape Material sales business are along the east side of Route 9 adjacent to the property. Along the West side of route 9 there is a motel, an auto services facility, other retail and residential structures as well as a sand or gravel storage area.

Thus, while the proposed action will introduce development into a natural environment, the Project Sponsor believes it will not widen the residential land use type beyond what exists immediately to the south and north of the project site. Rather, it will fill in and continue a similar type of land use and at a similar distance from the east side of route 9.

Regarding the proposition that “local-scale largely contiguous forest extends from the project site eastwards into these adjacent forested lands, including Fahnestock State Park,” there are multiple roads and developed areas with houses and other buildings between the subject property and Fahnestock State Park. East Mountain Road South, Esselborne Road, and Philangeli Forest Road are between the Hudson Highlands property and the main portion of Fahnestock State Park. While Philangeli Forest Road appears to have only one house with a clearing on it, Esselborne has development on both sides of the road with homes, driveways, and clearings stretching over 500 feet from the road itself. Other roads branch off Esselborne with development. East Mountain Road South is surrounded by homes with clearings as well. Horton Road, the closest road to the HHR property and bordering the property, already has numerous homes and structures. As such, this area between the HHR property and Fahnestock State Park, while it does provide valuable wildlife habitat, should be considered fragmented forest when compared to the unfragmented areas within Fahnestock.

It is also acknowledged that Route 9 has had moderately high traffic volume since before 1995. It is the Project Sponsor’s opinion that the traffic volume is high enough to cause wildlife mortality and/or repel wildlife. The Project Sponsor also believes that species or individuals that are not tolerant of proximity to human occupation would likely be repelled by either the road or the adjacent and surrounding development and human occupation ([https://www.fhwa.dot.gov/clas/ctip/wildlife\\_crossing\\_structures/ch\\_2.aspx](https://www.fhwa.dot.gov/clas/ctip/wildlife_crossing_structures/ch_2.aspx)). (A good introduction to the effects of roads on wildlife is available in the book *Road Ecology: Science and Solutions*, 2003. Many of the authors have since published many papers with updated information.)

HHR has been designed to cluster its 22 new houses, all of which are relatively close to Route 9 and Horton Road, while permanently preserving the eastern portion of the property closest to Fahnestock State Park. While the development of the HHR will decrease the forest habitat on the property, it should be noted that the area between HHR and Fahnestock is currently occupied by buildings and roads, and the area on which the new houses will be built is therefore today utilized primarily by wildlife species tolerant of proximity to human occupation. By completing HHR, the entire eastern portion of the property will be conserved in perpetuity meaning that the most ecologically sensitive area will be preserved. Without the HHR development, the eastern portion of the property would be at risk from development.

On a regional scale, HHR is located in a generally forested region of the Hudson Highlands of New York State. Development near the major roads is least likely to cause further damage to the forests of the region. More damaging would be to develop within any unfragmented forest or away from current roads and current development. To the extent that regional and landscape scale overlap, the issue is addressed in 3B.54.

With the development of HHR comes the permanent conservation of 163 acres of the highest value forested area of the property (77.6% of the total property). The Project Sponsor notes that, without the HHR development, those areas would all be open to future development; with the HHR development, those areas will be conserved in perpetuity.

**Comment 3B.57 (AKRF):** Related to the issue of forest fragmentation is its relationship to surrounding forest community types. As discussed in the DEIS, the project site is located

adjacent to two NYNHP-mapped/designated "Significant Natural Communities (SNC)", specifically a "high quality occurrence" of the "Appalachian Oak-Hickory Forest" community and the "Chestnut Oak Forest" community. Clearly, based on species descriptions provided in the DEIS these two ecological community types occur within the project site itself. Despite the fact that these community types are described as intermixed with other plant assemblages, the argument can clearly be made that the project site contributes to the "matrix" of forest that surrounds the NHP-mapped Appalachian Oak-Hickory Forest and Chestnut-Oak Forest.

**Response 3B.57:** While the entry road and the preserve part of the HHR property are in the vicinity of a Significant Natural Community as designated on the NYSDEC Environmental Resource Mapper, many and perhaps all of the homes are outside of the vicinity of a Significant Natural Community (<https://gisservices.dec.ny.gov/gis/erm/>). If any of the homes are inside the vicinity they are in a portion of the buffer associated with a Natural Community across Route 9. Below is a graphic (Figure 13A) taken directly from the website referenced above, showing the relevant Significant Natural Communities near the HHR property, followed by a blowup (Figure 13B) of the buffer around these Significant Natural Communities (the vicinity of the Significant Natural Communities) that extends onto the HHR property.

As noted in other responses, Route 9 creates a barrier for many species. The Vegetation Associations of the property are mapped in Figure 11 and discussed in response 3B.15. Please see that response for a list of the oaks on the property. The property on which HHR will be built is a part of the forest matrix that is between preserved areas such as Fahnestock State Park and Hudson Highlands State Park. It has been shown that the preservation of higher quality forest fragments does improve connections between larger preserved areas and decreases fragmentation effects. To minimize impact to the matrix forest, HHR proposes to preserve 77.6% of the onsite existing forest in its current state under a conservation easement. On the remaining 22.4%, the proposed design and HOA rules seek to preserve as many trees and forest canopy as possible. The HOA regulations state *"Trees are an integral part of the overall image and character of Hudson Highlands Reserve and must be protected. Trees located on Residential Lots, open lands, and other natural areas may not be disturbed or removed without prior specific approval for each tree. Trees identified and tagged to be significant (trees that are 18 inches diameter at breast height (dbh) or larger) will remain."* The regulations remind homeowners of the significance of "significant trees" 44 times in the HOA rules and regulations.

Importantly, as has been stated, with the development of HHR comes the permanent conservation of 163 acres of the highest value forested area of the property (77.6% of the total property). Much of the area conserved is within the "vicinity of a Significant Natural Community" otherwise designated as a "Natural Communities Near This Location." (Environmental Resource Mapper ny.gov) The Project Sponsor notes that, without the HHR development, those areas would all be open to future development; with the HHR development, those areas will be conserved in perpetuity.

Search

Tools

**Layers and Legend**

- Watershed Subdivisions for Cakes
- State Regulated Freshwater Wetlands (Outside of the Adirondack Park)
- State Regulated Wetland Checkzone
- Imperiled Mussels
- Mussel Screening Ponded Waters
- Mussel Screening Streams
- Significant Natural Communities
- Natural Communities Near This Location
- Rare Plants or Animals
- Base Flood Elevation Plus 72/75 Inches Sea-level Rise
- Limit to Moderate Wave Action

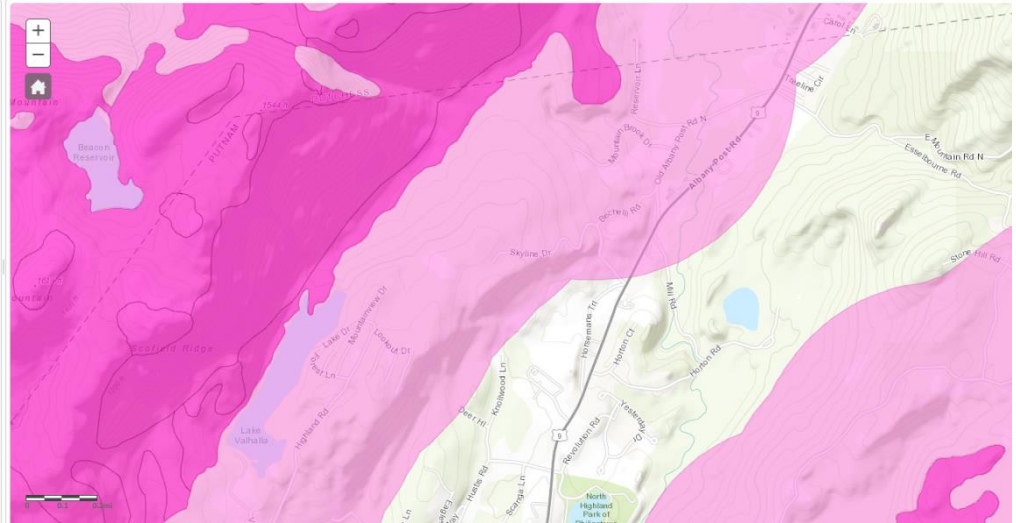
Other Wetland Layers

Reference Layers

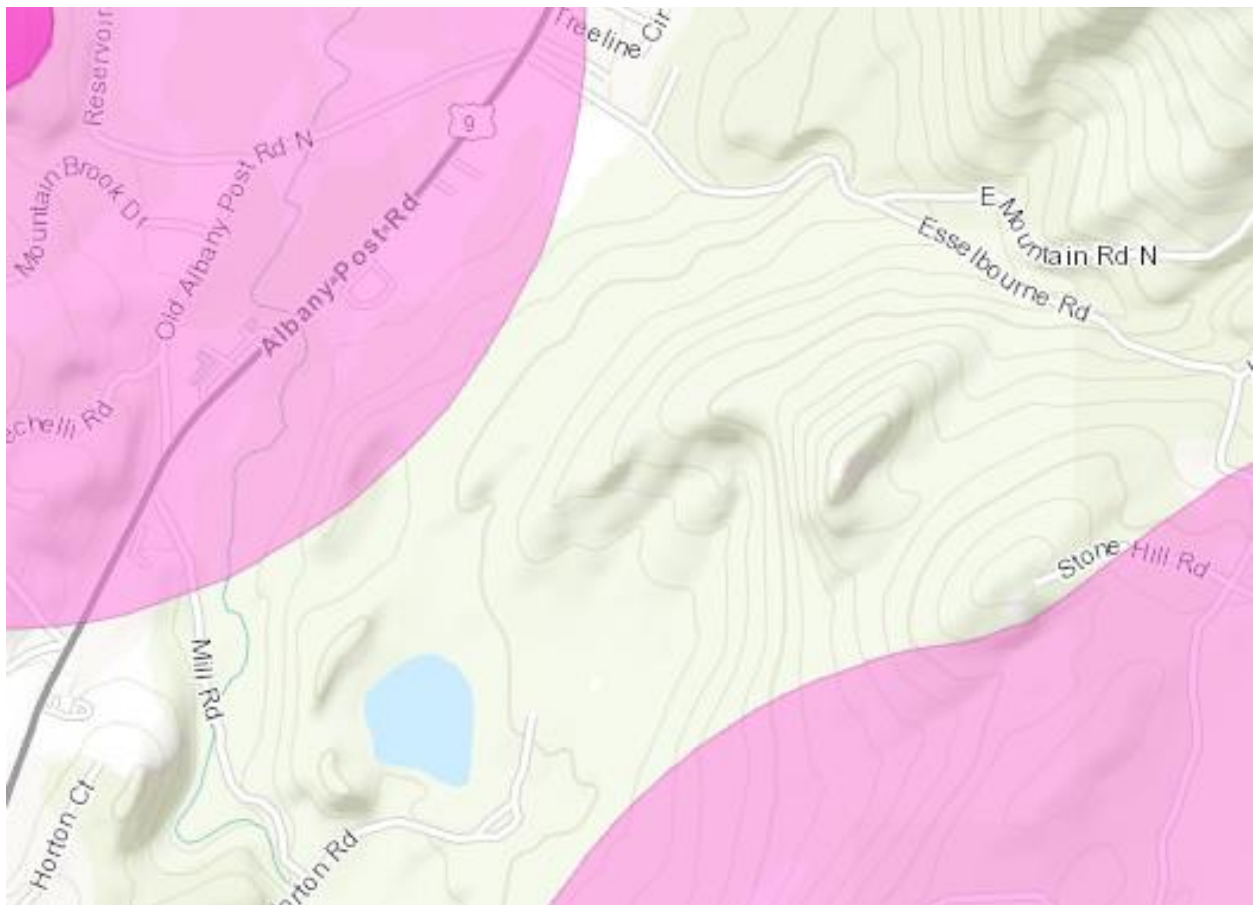
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**Figure 13A: Significant Natural Communities**



**Figure 13B: Significant Natural Communities (Blowup)**

**Comment 3B.58 (AKRF):** The NYSDEC Hudson Valley Natural Resource Mapper maps the project site itself as part of the following two forest habitat designations: "Matrix Forest Block" and as part of the most critical "Large Forests: Globally Significant (>15,000 acres)":

a. Matrix Forest Blocks: Matrix forests represent the largest, most intact forests in the northeastern United States, whose size and natural condition allow for the maintenance of ecological processes, forest communities, and populations of forest-interior species. Conserving large, high quality forests and connections between them will allow plants and animals to move north and higher in elevation as the climate warms. (Publisher: The Nature Conservancy Eastern Conservation Science and the New York Natural Heritage Program. Publication Year: 2006).

b. Large Forests: The Hudson Valley is largely forested, but forest patches differ in relative ecological significance based on size, connectedness to other forest patches, and other factors such as invasive species and deer browse. In general, larger forests provide greater ecological value than smaller, fragmented patches, and many wildlife species depend on intact forests of at least 200 acres with little or no human development. Smaller forests may nevertheless provide important habitat values and stormwater-related benefits. (Publication: This layer was created from 2010 land cover data developed for the National Oceanic and Atmospheric Administration's Coastal Change Analysis Program. 2015).

c. The project site's connection to these Matrix and Large forest NYS-mapped designations is also evident when examining aerial photos contained in the DEIS and larger-scale aerial imagery. However, at p.94, the DEIS states: "Approximately 16 acres of forest with an oak-hickory association will be disturbed as part of the proposed project, but this forest should not be considered as part of the Appalachian oak-hickory matrix forest. Contrary to being a **matrix** forest, this particular forest type was observed on the property in smaller, fragmented communities." This statement does not appear to be accurate, based on review of the NYSDEC-mapping of the matrix forest and aerial imagery.

**Response 3B.58:** The NYSDEC Hudson Valley Natural Resource Mapper is a useful tool, but some things about the property as portrayed in the resource mapper should be noted. The mapper notes that *"This tool is intended for general information and planning purposes and does not indicate the extent of DEC regulatory authority. It contains data compiled from numerous sources and may not be complete or accurate."* The NYSDEC Hudson Valley Natural Resource Mapper calculates "core forest" by buffering roads, so that anything at least 100 meters from the boundary with non-forested areas is designated "core forest" regardless of the quality of the forest or the quality of the area between the designated "core" and the road. Part of the HHR property is designated core forest for the simple reason that it is more than 100 meters from the road which is non-forested.

Recently, the New York State Department of Environmental Conservation – Division of Water sponsored the Hudson Valley Forest patch update and Assessment, the objective of which was to delineate road-less forest patches throughout New York State and to assess the condition of those patches within the Hudson River Estuary Watershed. The resulting forest condition index



is portrayed in the NYSDEC Hudson Valley Natural Resource Mapper. The HHR site forest condition is designated in the lower middle group (5th from the top out of 8), 60% to 80%. The specific designated condition for the patch is 69.2%. The forest patch per the Mapper includes also the residential areas along Horton Road and to the west of East Mountain Road South, the development along Yesterday Drive including the cul-de-sac, the edge of North Highland Park, the cul-de-sac of Stephanie Lane, Walmer Lane, Parks Boulevard, Hy Vue Terrace, Downey Lane, Stone Hill Road, south side of Esselbourne Road and up to Albany Post road. The fact that this designated "forest patch" includes those areas of development seems to indicate that houses will not preclude the area from still being designated a forest patch by the NYSDEC Hudson Valley Natural Resource Mapper. It is instructive to note that this forest patch is the lowest "forest condition index" of the surrounding area, 69.2%. For example, the parcels to the north along Route 9 just north of Esselbourne Road are designated as condition 91.7%. The parcel to the East of Esselbourne road is 80.3%. The area on the other side (east side) of E Mountain Road South is 98.6% condition. Furthermore, the conserved side of the property is the side nearest to the higher forest condition areas as designated by the NYSDEC Hudson Valley Natural Resource Mapper.

The NYSDEC Hudson Valley Natural Resource Mapper maps the project site itself as part of the "Matrix Forest Block." "Matrix Forest Block" is defined by New York State as large contiguous area whose size and natural condition allow for the maintenance of ecological processes, viable occurrences of matrix forest communities, embedded large and small patch communities, and embedded species populations. However, the "Matrix Forest Block" as mapped by the NYSDEC Hudson Valley Natural Resource Mapper includes a great deal of developed area and is fragmented, not contiguous. For example, the Matrix Forest Block containing the HHR property also includes route 9, all the development along route 9, the areas of Cold Spring north of Main Street and Cedar Street, the east edge of Beacon including the area off Old Town Road, the development around Oscawana Lake, and other developed areas. The fact that areas are in the Matrix Forest Block of the NYSDEC Hudson Valley Natural Resource Mapper does not mean that these areas are undeveloped, all forest, or important forest, but rather that they fall into a wider area of largely forest. The HHR property would still be relatively undeveloped compared to many other areas within the "Matrix Forest Block" as defined in the NYSDEC Hudson Valley Natural Resource Mapper if developed as planned at this time with 22 new homes in addition to two existing homes and one existing commercial structure on Route 9.

As evidenced on maps, the HHR property is surrounded on all sides by roads and by varying degrees of development.

As of March 24, 2021, there is no "Large Forests: Globally Significant (>15,000 acres)" designation on the NYSDEC Hudson Valley Natural Resource Mapper maps. A Google search resulted in "No results found for "Large Forests: Globally Significant" (>15,000 acres). We are not aware of what designation the commenter is referencing. <https://gisservices.dec.ny.gov/gis/hvnm/>

Importantly, with the development of HHR comes the permanent conservation of 163 acres of the highest value forested area of the property (77.6% of the total property). The Project Sponsor notes that, without the HHR development, those areas would all be open to future development; with the HHR development, those areas will be conserved in perpetuity.

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**Comment 3B.59 (HHLT):** The key conclusions about fragmentation in the DEIS are drawn from the 1998 Lathrop paper. In the 20 years since this paper was published, the science of conservation biology as it pertains to habitat fragmentation and connectivity has evolved tremendously, and this updated science should be used as the basis for decision-making. Up-to-date science more fully accounts for the entire suite of impacts that result from the placement of development into natural areas. In addition, the conclusions drawn from the Lathrop paper focus on only one of five criteria for conservation development – proximity to existing human infrastructure (or “habitat fragmentation potential”). The DEIS does not factor in the other four criteria, including proximity to water resources, where development in close proximity (such as houses wrapped around a pond) has severe adverse impacts, according to the Lathrop Paper.

**Response 3B.59:** The analysis on landscape fragmentation or perforation shows that the creation of HHR will cause 6.7 acres of direct habitat loss (from added impervious surfaces) and the conversion of an additional 30.4 acres from existing vegetative surfaces to landscaping (with native plants), may increase habitat degradation, and that concentrating the disturbed areas close to the already established medium to high-volume road (U.S. Route 9) will minimize the degradation or disturbance to the forest on the property as a whole.

The 1998 Lathrop paper was used in drawing key conclusions about fragmentation or perforation in the DEIS, as the commenter notes. This particular analysis was used as a starting point because the analysis had been completed on Sterling Forest, which is in the same region as HHR, and the analysis has been accepted by various New York governing bodies as reasonable. Subsequent research in conservation biology was, however, also taken into account. Please see Appendix G for a partial list of references used directly or as background for the analysis. Though the science has evolved tremendously as the commenter points out, the results of the Lathrop 1998 paper are still valid. In particular, the points in question, that areas close to heavily used roads are far less valuable as conservation areas than those in the interior of a forest and that the effects of roads and developments extends into the edge of the forest, still hold. There has been refinement of mapping methodology, which Lathrop and other scientists have worked on, and which the Project Sponsor’s analysts follow closely.

It is now known that roads have four main ecological effects on animal populations and these effects become apparent after increasing time lags: habitat loss (noticed most immediately), reduced habitat quality, wildlife mortality, and reduced connectivity (typically noticed after a fairly significant time lag) (Foreman et al. 2003). On a macro scale, Route 9 is the largest contributor of road ecological effects on the HHR property. Route 9 and its associated development presently separates the HHR property from Hudson Highlands State Park. Likewise, the other roads which cut the HHR property off from Fahnestock State Park, such as East Mountain Road South, Esselborne Road, and Philangeli Forest Road between the HHR property and Fahnestock State Park already affect the HHR property. The combined effect of these roads is that the HHR property is considered to be a fragmented forest, and species that prefer interior, undisturbed forest are unlikely to regularly use or reside in the HHR property.

The five parameters used in the cartographic modeling analysis of the environmental costs or constraints that development posed as laid out in Lathrop and Bognar, 1998 are:



1. Development limitations due to soil conditions/steep slopes/flooding
2. Non-point source pollution potential due to proximity to water/wetlands
3. Habitat fragmentation potential due to distance from existing roads and development
4. Sensitive wildlife habitat areas
5. Visibility from nearby hiking trails

The analysis was completed in order to prioritize lands for either acquisition and preservation, or development. In the design of HHR, similar parameters were used to determine which areas are least harmful to develop, and which areas should be preserved in order to give the most benefit to wildlife. HHR based decisions on the advice of its hired professional experts, who took into account more recent research since 1998 and site specific characteristics. It would be difficult and is unnecessary to give a complete list of the hundreds or thousands of peer reviewed articles and books that the Project Sponsor's experts have read or published. A partial list of references, one of which was co-authored by one of the Project Sponsor's experts and Richard Lathrop, that have contributed to this analysis is attached as Appendix G. For background in understanding fragmentation ecology, a good ecology textbook is recommended and has been studied and used as a basis for teaching by some of the Project Sponsor's experts. Some examples are *Ecology and Field Biology* by Smith and Smith (2000) or *Ecology from Individuals to Ecosystems* by Begon, Townsend and Harper (2021) or *Ecology* by Krebs (2008). *The Princeton Guide to Ecology* edited by Simon A. Levin (2009) also contains some relevant sections (Ecological Dynamics in Fragmented Landscapes is one such section). For information on the impact of fragmentation on birds, Bregman et al. (2014) is a reference.

All five parameters have been addressed in the DEIS. The first parameter, which recommends avoiding development limitations due to soil conditions/steep slopes/flooding is addressed in the DEIS IV A 1c. This analysis led to the preservation of the Clove Creek Flood Plain, the steep slope adjacent to the floodplain, the steep slope on the eastern side of the property, and the steep slope along route 9 with the exception of the entrance road from Route 9. The second parameter, non-point source pollution potential due to proximity to water/wetlands, has been addressed in IV A2, and was used in establishing wider buffers and making other modifications to the project plans (including the decision not to use Ulmar Pond as a source for water for firefighting). The third parameter, habitat fragmentation potential due to distance from existing roads and development, has been addressed in IV B1c and IV B2c, and was used in locating the elements of the proposed project, and in making some of the most recent revisions to the project plans. The fourth parameter, sensitive wildlife habitat areas, has been addressed in IV B1a and IV B1b, and was used in locating the elements of the proposed project. The visibility issues have been addressed in IV D1b.

**Comment 3B.60 (HHLT):** The main source of information on fragmentation cited in the DEIS is the Lathrop 1998 paper about Sterling Forest. This paper is now 20 years old and in the intervening two decades both mapping technology and the science of analyzing the effects of fragmentation and perforation has progressed significantly, and these more up-to-date approaches should be used to create a site design that fully protects natural resources. Fragmentation is a multifaceted issue that includes many aspects e.g. sound, light and chemical pollution, in addition to loss of contiguous forest and habitat/forest perforation. A forest may be effectively fragmented without visually appearing to be so, and simple straight line pathways are now no longer understood to factor in the full set of obstacles in movement across the

landscape (Beier, Paul. 2018). A rule of thumb for widths of conservation corridors: Width of Conservation Corridors. Conservation Biology. 10.1111/cobi.13256.).

Also, fragmentation is now defined, in part, by functional loss within the ecosystem: whether wildlife continue to have the ability to access different habitats for their different needs that they seek during daily, seasonal, annual, or lifecycle-based migrations.

**Response 3B.60:** As noted in Response 3B.59, though the Lathrop 1998 paper provided the outline of the DEIS analysis, more recent information has been used in the analysis and current technology was used. Please see Response 3B.59 for a discussion of the background and recent research of the analysts.

Updated technology which allowed for a more nuanced analysis with more variables was used in the analysis of HHR compared to the Sterling Forest analysis of 1998. Specifically, a newer version of ArcGIS was used in the analysis. The newer version contains many upgrades which can be reviewed on the ESRI website (esri.com). Specifically important to the analysis, the newer ArcGIS software includes the “3D Analyst” and the “Spatial Analyst” extensions which make it easier to add multiple buffers and to easily look at roads of multiple traffic categories and analyze them separately. Clipping and buffering are much simpler and more powerful in the new technology. The Lathrop paper indicates that Arc/Info (6.1), Geographic Resources Analysis Support System (GRASS version 4.1) and ERDAS Imagine (8.0) software packages were used to support the GIS analysis. ArcGIS 10.3 was used in the Sponsor’s analysis.

As noted in other responses (see 3B.71), the impact of the proposed project is technically perforation rather than fragmentation. The Project Sponsor has designed HHR with the intent to minimize effects of the perforation. For example, Figure 31 of the DEIS shows how clustering development near existing roads minimizes forest fragmentation, as well as effects of perforation, (adapted from Gaertner et al. 2007). Section B2a of the DEIS discusses the impact on habitat for interior forest species and specifics on how HHR will minimize negative impacts. It is noted that HHR was designed consistent with the principles recommended in the 2017 publication “Guidelines for managing wood thrush and scarlet tanager habitat in the Northeast and Mid-Atlantic regions” (Lambert, J. D., B. Leonardi, G. Winant, C. Harding, and L.Reitsma. As only limited areas of lawn will be introduced, damp leaf litter will be maintained in non-lawn areas. Damp leaf litter maintains a supply of invertebrate prey for the scarlet tanager and wood thrush as well as other insectivorous bird species. The publication notes that “wood thrushes and scarlet tanagers consistently reach their highest breeding densities in mature to old forests that are dominated by hardwoods and contain a mix of large and small trees. The layered vertical structure may result from canopy openings created by forest management or natural disturbances.” The Project Sponsor will keep most mature trees and the loss of some may result in canopy openings. The Project Sponsor will conserve 163 acres of forest, the majority of which is on the portion of the property farthest from the road consistent with the recommended practice in the 2017 publication to conserve habitat blocks >250 acres in landscapes with >65-80% forest cover. The conservation area of HHR is a majority portion of the needed >250 acre conservation area which can be added to by neighboring land owners. The 2017 publication also recommends clustering new construction near existing roads and making use of previously disturbed land, as the Project Sponsor does. See DEIS Figure 31, which is taken directly from Lambert et al, (2017).

Other methods of minimization of negative impacts are noted in section IV B2b and IV B2c of the DEIS. There is currently no site design that fully protects all natural resources, but HHR uses best practices to minimize any negative effects.

The commenter has mentioned sound, light, and chemical pollution as risks. Given the high level of sound pollution emanating from Route 9, potential sound pollution from construction activities is minimized by locating proposed development in the portion of the property as near to route 9 as site conditions permit. Long term sound pollution is minimized by the insulating qualities of the homes that will contain most noise from future occupants (See Response 3B.55 for discussion on sound). The HOA Residential Design, Maintenance Rules and Regulations (p.31) limits potential chemical pollution. Residential Lot Owners must only use chemical-free organic fertilizer with preference for compost or manures. Chemical fertilizers and pesticides are prohibited from use. Chemical fertilizers disrupt soil chemistry which can harm local flora; furthermore, chemical fertilizers flow into surface and ground water, affecting the water supply. Light pollution will be minimized by restricting lighting to downward-directed exterior lighting sources of low lumen intensity.

Beier 2018 deals with the macro scale. The focus of the article is setting a rule of thumb for corridor width that a corridor should be at least 2km wide except at unavoidable bottlenecks such as highway crossing structures. The article also notes that edge effects from artificial night lighting, noise, chemical pollution, nest predation, nest parasitism, invasive species and other disturbances are biologically significant at distance of up to 300m. The end of the article mentions that for smaller habitat blocks a narrower corridor may be appropriate and that a corridor longer than 80km may need to include one or more large habitat patches. It is the Project Sponsor's opinion that the macro scale of the discussion and the focus on 2km wide corridors in the article does not directly apply to the proposed project.

**Comment 3B.61 (HHLT):** The Lathrop Paper also specifically mentions the sensitivity of three wildlife species in a nearby area of the Highlands region (Sterling Forest), one of which is found on the property: red-shouldered hawk. It specifically sites the red-shouldered hawk's need for both "forested wetlands and adjacent upland forest" (p. 34), underscoring again the need for species' access to different habitats, like both water and forests.

**Response 3B.61:** As mentioned in DEIS IV.B.1.b.ii., a red-shouldered hawk (*Buteo lineatus*) was seen on May 26, 2015 and heard on July 9, 2015. Although a search was made in the area where the raptor was seen and heard, no nest site was found. It is possible that the raptor may have nested or was hunting in the vicinity of the property (p. 86 of DEIS). It is agreed that the red-shouldered hawk needs both forested wetlands and adjacent upland forest. The HHR will be preserving all wetlands on the property and a significant amount of upland forest habitat in perpetuity that will benefit species including the red-shouldered hawk. The protected wetlands are directly connected with the forested uplands on the property.

Red-shouldered hawks are sensitive to disturbance and typically nest in remote areas of contiguous forest, though nests have been documented near developed areas. The hawks often move through the Highlands on the fall and spring migrations. Red-shouldered hawks typically prefer mature wet woods such as hardwood swamps and riparian forests. Nesting territories are typically remote and contain standing water. They typically avoid areas of human habitation, steep uplands, dry slopes, open water, areas with limited conifers, and areas with too

many or too few forest openings. The birds may forage on the edge of their territory which may be less remote. Red-shouldered hawks in areas like the Highlands tend to nest in large mature trees. In non-breeding season, red-shouldered hawks are less restrictive in their habitat use. Red-shouldered hawks prey upon frogs, snakes, lizards, insects, salamanders, spiders, crayfish, snails, beetles, grasshoppers, small turtles as well as birds and mammals (Beans and Niles, 2003). The disturbance of 38.1 acres of existing habitat will reduce the amount of habitat available to red-shouldered hawks, although some of this will be revegetated with native plant species. The introduction of human habitation further into the forest will also make the project site less attractive for use by this sensitive species. The health of Ulmar Pond is expected to improve with the management provided when HHR is built and may increase prey availability for the red-shouldered hawk. Off-road vehicles, which have been observed being used on the property by trespassers, often contribute to nest failures. With the management of the area under the Conservation Easement and the occupation of the property by new homeowners under a HOA, off-road vehicles will be prohibited and the prohibition enforced by the HOA, which will also benefit the red-shouldered hawk. As a whole, it is believed that the preservation of the Clove Creek floodplain as well as the upland forest on the eastern side of the property more removed from busy Route 9 will contribute to the maintained health of the red-shouldered hawk population.

**Comment 3B.62 (HHLT):** Further, the Lathrop study states that its methodology is not meant for specific development siting, but rather it is a landscape overview. Lathrop Paper DEIS Appendix P Page 35 (or Page 11 of the PDF file) says: “this analysis was not designed to assess specific site suitability (i.e., for individual building placement).”

**Response 3B.62:** The Lathrop paper, Page 35, says “*Due to the limited spatial resolution of the underlying data, this analysis was not designed to assess specific site suitability (i.e., for individual building placement) but to provide a general overview of potential sensitivity and conversely, suitability of areas for development.*” Similar, but updated methodologies with higher spatial resolution of underlying data were used to assess HHR. An example of the updated methodology is that the relatively more heavily used roads in the Sterling Forest study were assessed to have an impact that extended a significant distance into the adjacent forest, while in the forest fragmentation analysis for HHR, the less heavily used existing and proposed roads were modeled with a smaller depth of impact consistent with current road ecology research, while maintaining the larger depth of impact close to the more heavily used Route 9. (For an overview of the impact of roads on wildlife, please see *Road Ecology* by Forman et al. (2003) and for more detail, other articles by these same authors.) Accordingly, the habitat value of the forested areas close to Route 9 were determined to be already significantly impacted, while areas closer to Horton Road and East Mountain Road were less so. Further, a large amount of site-specific detailed information such as the vegetation and wildlife currently using the HHR property (see DEIS sections IV A and B for more details on site-specific information) along with recent guidelines (see Responses 3B.59 and 3.60) was used to determine the most environmentally advantageous areas within the HHR property on which to locate buildings and roads. The end product is that some of the proposed residences will be located on previously disturbed areas near the end of Horton Road, while others are on the closest area to Route 9 that topographic conditions allow.

Specifically, in the Forest Fragmentation Potential and Preservation Potential Review, the consultants for the Project Sponsor used the National Land Cover Database for the coterminous

United States 2011 with updates as of 2014. For simplicity, multiple categories were reclassified into five categories:

Class Short Description	Reclassified as
11 Open Water	1 Open Water
12 Perennial Ice/Snow	NA
21 Developed, Open Space	2 Developed
22 Developed, Low Intensity	2 Developed
23 Developed, Medium Intensity	2 Developed
24 Developed, High Intensity	2 Developed
31 Barren Land (Rock/Sand/Clay)	3 Barren
41 Deciduous Forest	4 Forest
42 Evergreen Forest	4 Forest
43 Mixed Forest	4 Forest
51 Dwarf Scrub	5 Other Non-Forest
52 Shrub/Scrub	5 Other Non-Forest
71 Grassland/Herbaceous	5 Other Non-Forest
81 Pasture/Hay	5 Other Non-Forest
82 Cultivated Crops	5 Other Non-Forest
90 Woody Wetlands	4 Forest
95 Emergent Herbaceous Wetlands	5 Other Non-Forest

The analysis by the Project Sponsor used the measures of distance from the Lathrop and Bognar paper to analyze the major roads as those amounts are currently still relevant. In the updated methodology, the Project Sponsor’s analysis uses higher spatial resolution and thus is able to use a measure of 100 meter Euclidian Distance from minor dirt, dead-end dirt, or unused roads as the measure of fragmentation potential.

**Comment 3B.63 (HHLT):** The methodology in the Lathrop paper creates a composite model of five (5) criteria to assess development constraints (listed on p.32 in Table 1). The applicant applies only one (1) of these criteria – proximity to existing infrastructure (or “habitat fragmentation potential”) -- and does not factor in criteria such as proximity of development to water resources. Using just one criterion would not qualify as using the same methodology. In particular, one of the excluded criteria is proximity to water resources, and if that were included, the houses around the pond would likely have been found to have a severe adverse environmental impact, based on the Lathrop paper model.

**Response 3B.63:** All 5 criteria in the Lathrop paper are addressed in the DEIS as discussed in FEIS Response 3B.59.

Specifically, the criterion about non-point source pollution potential, which assesses impact on downstream water quality, is mentioned in the Lathrop paper on 2.1.2. The paper notes that it is problematic to use any particular buffer size as “*storm water management systems can either enhance the role of riparian buffers or greatly negate their effectiveness by short-circuiting the natural flow of storm runoff. The site-specific field studies, coupled with appropriate hydrological modeling needed to more conclusively define appropriate buffer zones, were beyond the scope of this study.*” HHR proposes best practices to minimize non-point source pollution and the

plans are to improve the water quality of the pond through management, thereby minimizing the need for a wider buffer. The minimum proposed buffer around Ulmar Pond is 140 feet. The structures in proximity of water resource are discussed in depth in Response 3B-52. HHR has made some modifications to the proposed plan. For example, some previously planned houses around Ulmar Pond have been moved away from the pond. Now there are only five new proposed residences overlooking Ulmar Pond. As depicted on the current plans, the homes are situated from 171 feet to 277 feet from the pond edge, and with property lines at 140 feet from the pond's edge. These buffers are far in excess of the 100-foot buffer required by Town Code. Existing established riparian vegetation will be preserved and enhanced to act as a filter, which is a recommendation of many ecologists and governmental environmental conservation departments to improve water quality including the USDA ([https://www.nrcs.usda.gov/wps/portal/nrcs/detail/?cid=nrcs143\\_014206#functions](https://www.nrcs.usda.gov/wps/portal/nrcs/detail/?cid=nrcs143_014206#functions)) and the NYSDEC (<https://www.dec.ny.gov/chemical/106345.html>). There will be no onsite subsurface sanitary disposal systems within 400 feet of the pond or any other surface water leaving a large buffer for any water filtering through the ground.

**Comment 3B.64 (HHLT):** The environmental suitability assessment for Sterling Forest (that was addressed in the Lathrop paper) was a starting point for understanding the site constraints. The Lathrop paper authors explicitly describe other considerations that were also important but not captured by the spatial assessment, including the need to cluster the development, which has not happened in this site plan due to the spreading of the houses and equestrian facility throughout the entire developable area of the site (Lathrop Paper DEIS Appendix P Page 35, 37 or PDF pages 11, 13).

**Response 3B.64:** The equestrian facility has been eliminated as an element of the project plans. Clustering development was mentioned in the Lathrop paper, and in the time since the paper's publication, has continued to be a guiding consideration in determining how to conserve land. The modified project plan concentrates development on 22.4% of the land while setting aside 77.6% in its current natural state. The Town of Philipstown, NY (11/27/2018) Chapter 175, Article V, section 19 Zoning - Open space development options states *"the Town encourages conservation subdivisions as an alternative to conventional subdivisions. In conservation subdivisions, units are clustered or sited on those portions of a property most suitable for development, while leaving substantial portions as undeveloped open space. Conservation subdivisions may include a variety of lot sizes, ranging from large farm or estate lots to small hamlet-size lots. Conservation subdivision results in the preservation of contiguous open space and important environmental resources, while allowing compact development, more walkable neighborhoods, and more flexibility than conventional subdivisions."*

HHR clusters the homes on the developable land and previously disturbed areas closest to Route 9 and Horton Road, while preserving wetlands and steep slopes as encouraged by a conservation subdivision. The modified project plans also have relocated some of the proposed residential units, leaving more developable land in its natural state. Much of the proposed development is situated on a previously cleared area, and adjacent to previously and currently inhabited areas. A large contiguous block of the eastern portion of the property is permanently preserved in an undisturbed state. In addition, the area around Ulmar pond and the steep slope area contiguous to the wetland along Clove creek are preserved.

**Comment 3B.65 (Klemens):** The Philipstown code desires to encourage conservation subdivisions recognizing the incredible natural resources that occur within the Town. In particular, the code calls for protected open space in a Conservation Subdivision that “*shall not result in fragmentation of the open space land in a manner that interferes with its proper management and protection of its conservation values*”. But like all well intentioned regulations, it is how the theory and intent of the law plays out on the land. The primary flaw I recognize in this current approach is that, by its very evaluative nature, it has become a driver of habitat fragmentation. While it assesses areas of high and medium conservation value, the end result is protecting the high conservation value areas and intensively developing the “medium conservation value” areas as stated in the AKRF letter of July 12, 2017 (page 3) that: *Part 3 should recognize that the proposed layout of the subdivision will disturb a significant part of the property identified to have “medium conservation value” and will necessitate the removal of mature, valuable vegetation in these areas.* This effectively means that the “medium conservation value” area is being intensively developed with 25 residences and a 40-horse stable. This effectively means that any wildlife movement through the site will be significantly compromised (save those species commensal with humans) and that the “high conservation value” areas will lose important connections both within the site and to the larger ecosystem. It is also important to take note as stated in the code in Section 175-21 (A) (1) that “*The open space protected must include all the land determined pursuant to § 175-20A (4) to have the most conservation value and, subject to § 175-20H, as much other land having conservation value as possible.*”

**Response 3B.65:** It is the Project Sponsor’s opinion that, by allowing any level of development, it can be argued the Philipstown code may become a driver of habitat loss and potentially fragmentation, if lands that are not already considered fragmented are involved. While such an impact from normal growth and development is unavoidable, the provisions provided in the Philipstown code are sound, progressive measures designed to mitigate this impact.

Development of forested wildlife habitat will unavoidably result in destruction of some of that habitat. In concert with the provisions of the Philipstown code, the design of HHR intends to preserve much of the habitat in a way such that the majority of the preserved area is in a large contiguous block. A large block of contiguous preserved area is on the eastern side of the property and is connected to other existing naturally vegetated areas. There is a portion of the preserved area that protects the historic road and another large block consisting of the Clove Creek wetland and adjacent steeply-sloped upland forest. All the preserved areas are connected to all other preserved areas within the project site. In addition, the Clove Creek wetland is connected off the property along Clove Creek to the area around Ulmar Pond. The high conservation areas are conserved as are portions of the developable area.

As seen in Figure 4, the revised project plans concentrate the proposed development almost completely within the area of low conservation value. Only the proposed entrance road that crosses an area of steep slopes will fall within an area of medium conservation value.

**Comment 3B.66 (Klemens):** In *Pathways* (2017) I outline three scales of consideration when assessing the appropriateness of a conservation design. The first is the macro-scale, looking at how the site lies within the larger ecosystem which has been characterized in the Conservation Analysis. However, there are two additional scales that are not properly considered. The meso-scale examines the placement of the built environment as it impacts, or protects, the through

site connection for the dispersal and maintenance of biodiversity. The proposed development eliminates connections through the “medium conservation value” area by an intensification of use that is incongruent with long-term sustainable protection. The “medium conservation value” area that has become in fact an ecological throw-away, despite the fact that conservation design standards state that not only should one protect the slopes and wetlands but also provide meaningful (functional) connectivity through the developable areas of the site to sustain the entire ecosystem.

The concept of meaningful connectivity stems from the abuse of the corridor approach to connectivity. While certain species follow defined dispersal routes, the majority of species disperse across the landscape akin to sheet flow of water across a field. Therefore, in order to maintain habitat porosity to allow the movement of wildlife through a development site requires leaving broad areas within the “medium conservation value” area intact to connect the Clove Creek floodplain and the surrounding forest slopes. The current design, filling up most of the “medium conservation value” area with development and hardscape, in the manner proposed, will irretrievably sever the connectivity between Clove Creek and the forested slopes. In the March 13, 2018 responses to public comments on Page 8 (Comment 1.12) Hammond states correctly that “conservation subdivisions include the developer setting aside valuable, *developable* land, which may be rewarded with additional building density. ”More of the “medium conservation value” area needs to be protected, in a manner that protects connectivity, and that could possibly be rewarded with density bonuses elsewhere on the site.

**Response 3B.66:** The commenter requests that the environmental review address the meso-scale that examines the placement of the built environment as it impacts, or protects, the through site connection for the dispersal and maintenance of biodiversity. To address the concern expressed that “the proposed development eliminates connections through the ‘medium conservation value’ area” and in particular, that “the current design...will irretrievably sever the connectivity between Clove Creek and the forested slopes,” refer to Figure 4, which shows that, with the exception of the entrance road, none of the medium conservation value area will be impacted by the proposed project. All of the development and disturbance is instead on the most developable blue-shaded “Low Conservation Value” area. Only the proposed entrance road is within the yellow-shaded “Medium Conservation Value”. Small portions of proposed lots 11 and 4, though not within the building envelope, are also within the medium conservation value habitat area. As noted, the entrance road to the property also cuts through the medium conservation value area.

In the opinion of the Project Sponsor, it is therefore incorrect that the medium conservation value area has become “an ecological throw-away” and is being developed, or that the development of what is actually low conservation value area creates “a hardscape” across the central low-lying portion of the site. As currently proposed, the majority (80%) of the developed area (30.4 acres out of the 38.1 acres of existing vegetation in the area slated for removal) will be landscaped with native plants, including the trees left on site. The tree canopy will continue to exist and the understory will either be left undisturbed or replanted with native species on the landscaped portion. In the opinion of the Project Sponsor, it is likely that many wildlife species will continue to move through this area. The roads and driveways will create hardscape and those species particularly affected by micro-scale barriers are addressed in Response 3B.68. There will be approximately 6.7 acres of new impervious surfaces (3.2% of the HHR property). The HHR property is surrounded on all sides by roads and development. On a macro-scale



assessment, the HHR property is a better place to develop than an area more remote from a major road.

The proposed project will not “sever the connectivity between Clove Creek and the forested slopes.” To minimize impacts to the connection between Clove Creek and the forested slopes, the high conservation value Clove Creek floodplain and bordering medium conservation value steep slope above it, are not proposed for development. The revised plan has also removed two homes from the south end of Ulmar Pond, further preserving an undeveloped natural connection between the pond and the Clove Creek floodplain across the steep slope, both on and off site. More importantly, the Clove Creek floodplain is connected directly to Ulmar Pond via the creek that outflows from the pond. Many aquatic and semi-aquatic species will preferentially follow the riparian corridor in order to move from the Clove Creek floodplain up to Ulmar pond and from there move into upland areas. Much of this is off of the HHR property, but wildlife do not recognize ownership boundaries without barriers, and the border of the HHR property will not be fenced. The unpaved historic road that currently cuts between Ulmar pond and the conservation area to the east of the pond will cease to be used south of the early nineteenth century barn, which will enhance connectivity from Ulmar Pond to the eastern preserved areas through upland habitat.

Project development has been proposed to be concentrated in the area with historic human disturbance and high percentage of exotic invasive species.

In further response to the comment on the meso-scale analysis of through site connections for wildlife populations, it is unavoidable that development will harm those areas on which actual construction occurs. However, the perpetual preservation of 163 acres of the 210.1 acre property will provide substantial undisturbed habitat that allows for wildlife movement across the project site.

**Comment 3B.67 (Klemens):** Finally, Response 1.18 on Page 12 of the response document mistakenly interprets the development as perforation, not fragmentation. Perforation maintains connections to adjacent habitats. The current development configuration for the reasons I have stated previously is not perforation, but fragmentation. It essentially creates a hardscape “wall” across the central low-lying portion of the site.

**Response 3B.67:** As indicated on Figure 1, all preserved areas will be connected to each other and to adjacent habitats, which is why, in the opinion of the Project Sponsor, the impact from the proposed project would be considered perforation. (Please see Response 3B.71 for a discussion on perforation vs. fragmentation.) In addition, the road system, which will serve the proposed 24 homes, will experience relatively light usage, and as such, is not expected to pose a significant barrier to wildlife crossing the project site. Some species, such as salamanders, may have more difficulty than others crossing roadways. However, the traditional pathways of highest use by these species (watercourses, wetlands, and their buffers) have been preserved with no new road crossings. Preserving traditional pathways of highest wildlife use is an example of an ecofriendly best practice. Low or no curbs will provide ease of movement. Please also see Response 3B.68 for more details on curbs. The types of curbs used is another example of an ecofriendly best practice. With ecofriendly best practices, most species will not be blocked by the road. There will be forest canopy throughout most of the project site,

including within developed areas. Using only downward facing lighting and high levels of insulation are other examples of ecofriendly best practices.

To avoid creation of “a hardscape” across the central low-lying portion of the site, the majority of that particular area (30.4 acres out of the 38.1 acres of existing vegetation slated for removal) will be landscaped with native plants including the trees left on site. Using only native plants in landscaping is an example of an ecofriendly best practice. The tree canopy will continue to exist and the understory will either be left undisturbed or replanted with native species on the landscaped portion. Thus, the Project Sponsor expects that many wildlife species will continue to move through this area. There will be about 6.7 acres of new impervious surfaces (~3.2% of the HHR property). It should be noted that the HHR property is surrounded on all sides by roads and development. On a macro-scale assessment, the HHR property is a better place to develop than an area more remote from a major road.

See Response 3B.54 regarding how the forest canopy will be maintained to the greatest extent possible. See Response 3B.67 and 3B.71 for a discussion of perforation vs. fragmentation.

**Comment 3B.68 (Klemens):** Finally, the micro-scale needs to be considered. This is very much part of the site plan design, but recognizes a host of impediments to wildlife movement created by hardscape. Ecological traps (designs that capture and kills small wildlife) such as curbs, catch basins, drains, hydrodynamic separators all need to be evaluated in terms of how they impede wildlife movement. In-ground swimming pools, which are stated as discretionary but possible on the house sites, can have a major impact on migrating wildlife. There are mitigation strategies to avoid this including wildlife-excluders incorporated into pool fencing. In short, apart from placing the site into a larger regional conservation context, the conservation analysis and design applied at the meso and micro levels fail to protect the ecological integrity of the site, and are reasonably likely to cause unreasonable and lasting significant impacts to the natural resources on and off the site.

**Response 3B.68:** The commenter asserts that the micro-scale needs have not been considered sufficiently in the DEIS when assessing the appropriateness of a conservation design.

HHR utilizes green construction, LEED Platinum certification and aims for zero-net energy use. The following Low Impact Development (LID) stormwater management concepts will be used in construction of HHR:

- Riparian buffers
- Soil restoration
- Velocity dissipaters
- Dry swales

The proposed road system will involve no new wetland or stream crossings. The emergency road access road that connects the end of Reserve Road to Horton Road, crossing over a braided stream/wetland system, already exists. It is a gravel road built several years ago by a previous owner. It was built under the Open Development Area roadway standards, which is used extensively throughout Philipstown. The road is built with little grading beyond that

necessary to shape the road. There are no curbs. Because this roadway will only be used for emergency services, it will be used very infrequently. Because it will be used infrequently, there is little, if any threat of animal/amphibian mortality and requiring crossing tunnels is not necessary in this area.

The remainder of the road system, except for the entry road from Route 9 is designed in accordance with the Town Road standards, without curbs. If the entry road from Route 9 is constructed, the applicant will be required to substitute "cape cod" or mountable curbs instead of the standard curbs in this area. The need to provide crossing tunnels along Highland Trail is apparent in the vicinity of station 2+50, 11+00 and 20+00. The applicant will be required to show crossings at these stations on their final plans.

The HOA Residential Design and Maintenance Rules and Regulations prohibit exterior swimming pools (both in-ground and above ground). Any pools must be enclosed within a structure that is part of or attached to the residence. There will therefore be no threat to wildlife from pools. Catch basins will discharge to daylight bioretention areas, level spreaders, or velocity dissipaters. Any small wildlife that may inadvertently fall into a catch basin/storm drainage system would have an available exit to return to a natural habitat. Hydrodynamic separators are not being proposed as part of this project.

As can be seen in the DEIS (p. 66), the state of Ulmar Pond will be improved to the benefit of wildlife.

See Response 3B.54 regarding how the forest canopy will be maintained to the greatest extent possible.

See Response 3B.67 and 3B.71 for a discussion of perforation vs. fragmentation.

**Comment 3B.69 (Audubon):** We have learned over the past decades that fragmentation of forests result in increased invasive plants and decreased native plants. Many non-profits in this Town have supported the 'green corridor' concept that allows wildlife species to migrate and survive unhindered by buildings, roads and other developments. Putnam Highlands Audubon, Constitution Marsh Audubon, Hudson Highlands Land Trust, Scenic Hudson and New York State Parks have all worked together for many decades to preserve lands in our community that form a "green corridor" and promote survival of our native flora and fauna.

**Response 3B.69:** The work done by Putnam Highlands Audubon, Constitution Marsh Audubon, Hudson Highlands Land Trust, Scenic Hudson, and New York State Parks to preserve lands for a "green corridor" and promote survival of native flora and fauna is to be applauded. Land preservation is accomplished through an array of methods including fee-simple purchase, donations, purchase of easements, and encouraging developers to set aside undisturbed land in their design. It is the intent of the Project Sponsor to constructively assist in this work by permanently preserving 163 acres in perpetuity. While this preserved land is not directly contiguous to other preserved land, it is in close proximity to Fahnestock State Park, and can serve to provide important habitat that supports the wildlife habitat function of Fahnestock. As it is also adjacent to other undeveloped parcels, the preservation of this land also serves to provide the future opportunity for these lands to be preserved and connected as

part of a greenway, even potentially eventually connecting to Fahnestock, and as such, can serve as part of a green corridor that is not open to future development.

**Comment 3B.70 (Scenic Hudson):** The area surrounding the proposed Hudson Highlands Reserve project site is widely known for its value to biodiversity and the natural beauty of the Hudson Valley. The site is within the NYSDEC Hudson River Estuary Program's Hudson Highlands Significant Biodiversity Area. Likewise, The Nature Conservancy recognizes the value of the large, continuous forests in this area with their Hudson Highlands Forest Block designation.

Any losses of habitat on this site are a loss to some of the largest and most intact areas of forest habitat in the Hudson Valley. Further, developments must conserve habitat corridors to allow wildlife (including threatened and endangered wildlife known to occur in the area) to move between habitat types on and off the project site, including travel between wooded uplands, Ulmar Pond, and Clove Creek. The applicant's preferred alternative, particularly when proposed under the guise of a conservation subdivision, does not conserve these corridors and, moreover, fragments the site.

For the reasons above, a more concerted effort should be made to cluster the development. Minimizing its footprint and including strong mitigation measures are critical to minimizing the development's negative impacts on this notable forest and biodiversity.

**Response 3B.70:** The Hudson River Estuary Wildlife and Habitat Conservation Framework notes that the entire Hudson River Estuary corridor is a significant biodiversity area. Figure 3 in this document maps the areas, but not in detail. It appears that there is no differentiation between the HHR property designation and the surrounding developed area. The Nature Conservancy often identifies land with high conservation potential for use in its strategic planning. The Nature Conservancy may have identified a Hudson Highlands Forest Block, though no map or description of the designation came up in a search on the Nature Conservancy website.

The proposed project is a conservation subdivision, meeting and exceeding what is required under the Town Code. About 77.6% of the project site will be permanently preserved, and the project has been designed to avoid environmental constraints. The proposed plan preserves the portions of the property with the highest potential wildlife habitat value and wildlife corridors, as well as cultural resources. All site wetlands and watercourses will be preserved completely undisturbed. The Clove Creek floodplain and the adjacent uplands will be preserved. The Clove Creek Floodplain is connected via a tributary to Ulmar Pond, which constitutes the primary wildlife corridor between the two. Recent revisions to the project plan increased the amount of land preserved in a natural state and expanded areas for wildlife movement.

See the Introduction on pages 1 through 4 for a discussion of the revised design of the proposed project, and the reduction of the footprint (area of disturbance) from the DEIS plan to the FEIS plan.

**Comment 3B.71 (Gordon):** Perhaps, someone could explain the section in the draft environmental impact statement of Sections B.2.C entitled, Forest Fragmentation Impacts. It concludes -- it's concluding sentence states, quote, There will be no true fragmentation though

there will be some habitat perforation. The use of the adjectives "true" and "some" seem to be quite telling, sounds a bit like being a little pregnant.

**Response 3B.71:** DEIS Section B.2.C states “There will be no true fragmentation, though there will be some habitat perforation.” To clarify this statement, Sharon Collinge, in her book “Ecology of Fragmented Landscapes” gives a thorough and scientifically accepted description of differences between habitat loss and fragmentation, as well a description and figures describing loss, fragmentation, and perforation. Perforation refers to a reduction in habitat in specific locations while all the remaining surrounding habitat is connected. Fragmentation is a reduction in habitat where segments of the remaining habitat are not connected to each other. Both Foreman (1995) and Collinge (2009), who have published and continue to publish extensive research on habitat reduction and fragmentation, are very precise in their use of these terms. Perforation is often seen as a phase of habitat loss leading to fragmentation. First there is shrinkage or perforation, then perhaps followed by bisection or fragmentation. Where the matrix of the forest is preserved, however, such as through a conservation easement, the impact would be limited to perforation without leading to fragmentation. These are all types of habitat loss with different spatial configurations. Some researchers, reporters, and writers of news or texts for the general public are not as precise as the main practitioners and use fragmentation as a shortcut term for all of these types or phases of habitat loss. The literature contains both uses. Habitat perforation, bisection and fragmentation almost always involve habitat loss. Both loss and fragmentation processes of landscape habitat change generally have adverse effects on overall landscapes for wildlife and native plants. The mechanisms are often different, and thus scientists make a distinction between fragmentation and loss. Some species are more responsive to spatial configuration than others. There can be and often is an increase in edge habitat with perforation. The proposed project will cause some elimination of the existing forest and habitat loss. As all preserved areas will remain interconnected, the proposed area of disturbance would be considered a perforation into the forest with an increase of edge habitat. This impact will be mitigated by the permanent preservation of 163 acres under a Conservation Easement, the elimination of some areas of invasive vegetation, and the replanting of disturbed areas and residential landscaping with native species.

**Comment 3B.72 (Hammond):** Recommendations were made to minimize impact on increasing fragmentation of forest by defining a specified building envelope on each lot, prohibiting the removal of vegetation outside this envelope during construction. I see no evidence of this recommendation being proposed by developer.

**Response 3B.72:** The Project Sponsor has developed a modular building system that can be semi customizable while fitting into the 2,500 – 3,000 square foot range and suggested locations on each lot that will minimize impact to the surrounding vegetation and the extent of perforation (see Responses 3B.67 and 3B.71 for a discussion of perforation/fragmentation). Any subsequent modifications to the lot are at the homeowners’ discretion, subject to HOA and local building department approval.

The largest concern expressed regarding fragmentation or perforation was along Ulmar Pond, the area from which lots have been withdrawn on the revised plan. This reduction in lots will reduce the level of perforation in an area of specific concern and further allow wildlife migration across and around the pond.

Restricting development to a specific building envelope on each of the lots will do little or nothing to avoid perforation. It is the clustering itself and locating the development as close as possible to Route 9 and existing areas of development that has a mitigative effect. Developing nearer to Route 9 keeps the development away from the undisturbed forest to the east and southeast of the property and minimizes perforation impacts. Because the lots are clustered, building envelopes would be close to each other and will have little or no positive value with regard to perforation. The designers estimated that on average, 36.3 percent of the area within the residential lots will remain undeveloped and have elected to not use building envelopes in order to maximize design possibilities. Lots are not permitted to be clear cut and covered with lawn. Rather, approximately 36.3 percent of the residential lot area will remain undisturbed as a result of the restrictive rules imposed by the HOA. For additional discussion regarding development on the residential lots, please see Response 3B.12.

### C. ZONING AND LAND USE

**Comment 3C.1 (AKRF): ZONING AND LAND USE** Figure 20 from the Water Resources section of the DEIS shows the boundaries of the Clove Creek Aquifer and Regional Aquifer subdistricts of the Town's Aquifer Overlay District in relation to the project site and proposed limits of disturbance, but they are not shown as overlays on the zoning map (Figure 8) nor are they discussed in the text on existing zoning conditions on page 108 — only the Open Space Overlay is mentioned. The FEIS should describe the applicability of the aquifer overlays on the proposed project and how the project will comply (i.e. the requirements of Town Code section 175-16 and the special permit approval necessary).

**Response 3C.1:** The limits of the Clove Creek Aquifer and the Regional Aquifer have been added to the Constraints Map of the plan set and to Figure 8 of the DEIS. The revised DEIS Figure 8 is provided as FEIS Figure 14 on the following page.

The existing zoning conditions on page 108 should have identified the Town's Aquifer Overlay districts as including the lands of the Hudson Highlands Reserve. The below table provides a breakdown of the Hudson Highlands Reserve lands by Aquifer District.

District	Area (Acres)
Regional Aquifer (RA)	167.6
Clove Creek Aquifer (CCA)	42.5
Total	210.1

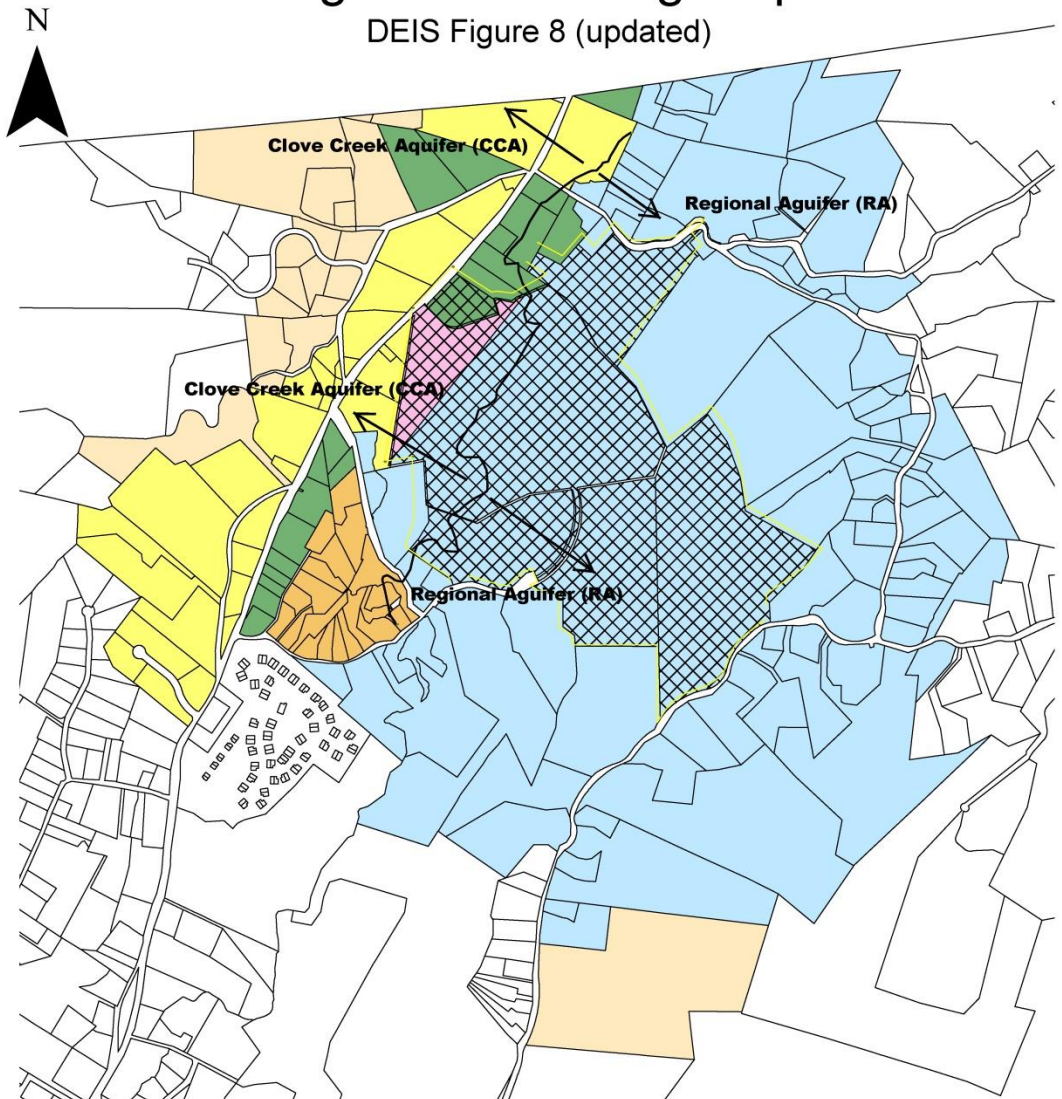
Section 175-16E prohibits certain uses and requires Special Use Permits for others. The Hudson Highlands Reserve project does not specifically include any of the prohibited uses. However, it is possible that one of the owners of the homes to be constructed with the Hudson Highlands Reserve would seek approval to install underground fuel tank(s) that have a cumulative capacity of 1,100 gallons or greater. This is prohibited throughout the town and will be so noted in the *“Residential Design and Maintenance Rules and Regulations”* that are included as Appendix J in the DEIS. This notation, the plan review by the HOA, and the Code Enforcement Officer of the Town of Philipstown, in combination, will assure that this prohibition will not be violated.

As originally proposed, arguably, the equestrian center may have been viewed as “Storing” manure (Section 175-16E (3)l). As originally proposed, the manure was being “collected” for routine removal from the Hudson Highlands Reserve. Because the equestrian center will not be built, there will be no storage of manure and therefore a Special Use Permit is not required.








Similarly, because the equestrian center will not be built, there will be no reason for a large staff and equipment to plow snow. Snow removal will be contracted out and there will be no storage of road salt within the Hudson Highlands Reserve property. Accordingly, a Special Use Permit is not required.

# Figure 14 Zoning Map

DEIS Figure 8 (updated)



## ZONING DISTRICT

-  HHR SITE
-  HC
-  M
-  OC
-  RC
-  RR
-  SR



Land Use source 2018 Town of Philipstown Final Tax Assessment  
Roll map prepared by Badey & Watson, January 2018  
rev March 2021



**Comment 3C.2 (AKRF):** The two paragraphs on the top of page 112 include repetitive language when referring to the 11.1 acre area of the project site proposed for rezoning from M to RR and subsequently planned for conservation purposes. If this language will be used in the FEIS, please consolidate the language into one paragraph as follows:

*"The 11.1 acres of this property is categorized as having a high or medium conservation value, with 2.0 acres categorized as having a high conservation value and 9.1 acres categorized as having a medium conservation value. This land is adjacent to Clove Creek and fronts Route 9 and contains steep slopes, wetlands, and significant water ecology, making it unsuited for most uses permitted in the M district. Rezoning the 11.1 acres from M to RR will allow the Applicant to designate this portion of the property, except for the area needed to accommodate the road that is necessary to access the developed areas of the Reserve, as open space and preserve it under a conservation easement. This action will allow the property to be compatible with the surrounding area and future development."*

**Response 3C.2:** This repetition is the equivalent of a typo, caused by moving a paragraph from another part of the document with the intent of streamlining the two paragraphs into one paragraph as suggested by the commenter, but then neglecting to do so. The paragraph suggested by the commenter is accurate, and obviously an improvement over the "typo" in the DEIS. Unfortunately, while the mistake is annoying, the DEIS can't be changed at this point. There is, at least, no contradiction inherent between the two paragraphs.

**Comment 3C.3 (HHLT):** Land Use and Zoning (Section IV.C of DEIS) Requirement for Contiguous Open Space and Wildlife Corridors is Not Met: Section 175-19B of the Zoning Code states: *"Conservation subdivision results in the preservation of contiguous open space and important environmental resources [...]"*. Section 175-20H (2) states that the required open space must be *"protected from development by a conservation easement and does not result in fragmentation of the open space land in a manner that compromises its conservation value."* However, the applicant's proposed conserved open space is cut in two distinct pieces by the houses that line the western side of the pond. This fragments habitat for amphibians and reptiles as noted in the Coleman September 2014 letter included in the Conservation Analysis (Appendix C CD Pages 7 and 232). Furthermore, the layout of the equestrian facility constricts the corridor from the steep slopes on the east side of the property to Ulmar Pond.

**Response 3C.3:** The Project Sponsor believes the current design provides interconnections among all conserved areas of the project site. The newly revised plans reduce the number of homes around Ulmar Pond, which according to the Project Sponsor, expands this connection further. The equestrian center has been removed as an element of the proposed project.

**Comment 3C.4 (Ewen):** Forty horses is a lot of horses. Now, according to the zoning regulations of the town of Philipstown, each horse requires an acre. If you own a horse, you have to have it parked on an acre. And I'm -- it's not 40 acres and a mule. I want to know if there's 40 acres set aside for the 40 horses who will poop and pee. And that's a lot of consideration those of us who are going to live nearby.

**Response 3C.4:** The Equestrian Center has been removed as an element of the proposed project.

**Comment 3C.5 (Prentice):** So amongst the things that the comprehensive plan says about open space development, I'm going to read from Chapter 3, Section R, capital letter R, 2.4. "Allow open space (cluster) development, with safeguards to ensure that such developments do not lead to more development than would otherwise occur and that they preserve open space that the town wishes to protect." Just going to repeat one of the clauses, "With safeguards to ensure that such developments do not lead to more development than would otherwise occur." Now, I don't understand as much about this application as you do, but my interpretation is that because we are in the open space overlay, then the applicant was doing -- they were doing a conventional application would have the opportunity to build houses. This plan calls for 25 houses and calls for a commercial equestrian center capable of housing 40 horses.

**Response 3C.5:** The quoted clause was not adopted into the Zoning Code, and therefore has no regulatory bearing. As noted in the DEIS and elsewhere in the FEIS, the proposed lot count was developed by the Project Sponsor and the Town's consultants in conformance with the requirements for a conservation subdivision as outlined in the Zoning Code. The Equestrian Center has been removed as an element of the proposed project.

**Comment 3C.6 (Hammond):** The rebuttal to almost all concerns or requests is the repetition that the HHR is preserving 170.8 acres of land with higher conservation value and therefore whatever negative environmental effect generated is acceptable. I disagree. This land was already preserved from development by current regulation. Stubbornly insisting that that is enough value to get away with doing whatever one wants is not a valid argument.

**Response 3C.6:** The area of the project site proposed for conservation is not prohibited from development by current regulation. As the Project Sponsor has noted, approval was granted for another home to be built within a portion of the proposed conservation area. Some of the area, but not all, falls under wetlands and steep slope regulations, but these regulations still allow development through a permit process. The Project Sponsor's intent is to permanently prevent development of 163 acres of this privately held land through a Conservation Easement.

## D. COMMUNITY CHARACTER

### D.1. Surrounding Development

**Comment 3D.1 (Rogoff):** Now, there are plans for commercial events and classes and manure machinery on their website. I reviewed their website, and it states, quote, the essential attraction as to the development is the equestrian facility. We have determined the equestrian center, clubhouse, have paddocks to compose the amenities package for the development including a separate building, housing a second indoor arena and spectator area.

It now appears that they represent that this development will not use community roads, schools, and other resources such as our water, our light, our wildlife, our air. It does not make sense that people will pay millions of dollars not to use our community resources. Their representations appears to be green wash.

**Response 3D.1:** The Equestrian Center has been removed as an element of the proposed project. The 22 new homes will add a minimal amount of additional traffic onto local roadways, and if the homes end up being occupied year round, and all send their children to public schools, the impact from 22 new homes would again be negligible. Water supply will be derived from wells onsite, and the aquifer recharge that occurs within the bounds of the project site far exceeds the demand that would exist.

**Comment 3D.2 (Wendel):** I moved here for the hiking and the beauty of this area which is so famous, historically. And, frankly, I moved from 114th Street in New York City, and I think this area is well-known for its unbelievable beauty, for the hiking opportunities. Look at all the young people getting off the train every weekend in Cold Spring and Garrison for the hiking. And I would like to say that this -- to call this spot, this subdivision a conservation subdivision is extremely unfair to that new generation of hikers and nature lovers. And it sends the wrong message to people like my 28-year old daughter and her boyfriend who love this area for its beauty and its historic properties. And, I think, in addition to being extremely important for -- to have the first conservation subdivision truly be a conservation subdivision, with the qualities that Michelle Smith discussed in her prospective in the PCNR. It's also important to remember that, ultimately, it will greatly reduce housing price and the value of properties in this area to have this type of subdivision and to turn this area into a suburban community when it has such unique properties that are so important to the housing values and property values here. And to its fame and its prominence, historically. And I beg that consideration to be made in this process.

**Response 3D.2:** The proposed project is not on public land, and would not take away any land that could be enjoyed by hikers and nature lovers. By placing a Conservation Easement on a large piece of forested land, it opens up that land not previously available for the enjoyment of hikers and nature lovers who would live within the proposed subdivision, and potentially for others in the future. It is the Project Sponsor's opinion that the anticipated value of the proposed homes will be greater than those in surrounding neighborhoods, and if anything, could enhance the value of nearby homes, not reduce them.

**Comment 3D.3 (Majeski):** Have we thought about the mental health of the people of this community? The noise, the traffic, the anger, that this will bring upon the people within that area? You really have to think about the mental health of what people will feel, the stress on the

road there constantly, and the sound of chainsaws every day drilling, all of that noise, I really take that into consideration. And there is a reason that all these people pointed out several things here. The law. The law is in place to protect land, and what you're here. Those laws were written for reasons.

**Response 3D.3:** The proposed project is being reviewed in accordance with all applicable local, state, and federal laws. The Project Sponsor would be required to adhere to all applicable regulations related to construction in the Town Code.

**Comment 3D.4 (Kantor):** After reading most of the documentation available through the town hall and listening to the many criticisms leveled by diverse parties at the hearing, it is difficult to imagine a worse development proposal. Unlike Glassbury, which transformed a run-down quarry into a bright, attractive and socially useful addition to the Highlands, the HHR plan has few redeeming features. As specified in the planning materials, this development proposes to transform a pristine and ecologically important area of the highlands into a hideous commercial and residential enclave. The HHR will bring into a delicate ecological environment a large polluting commercial horse-riding business that is harmful to wildlife that will stand out as an anomalous scar in an otherwise green and pleasant setting. A wide variety of critics have pointed out the enormous increase in traffic that will result from this development, as well as the substantial pollution of land and water in our neighborhood by a large concentration of horses feeding and excreting.

The residential parts of this development are also questionable. Unlike Glassbury, which has added significantly to the area's housing stock with more than 90 homes dedicated to underserved residents (seniors and civil servants), the HHR proposes 25 homes aimed at the luxury market and part time residents seeking weekend retreats. The ill-conceived housing plan has been judged to choke off access by valued wildlife to critical ponds and waterways, while only leaving less valuable (to wildlife) landscape on surrounding slopes. Although the area should be open to weekenders, it should not be at the price of accommodating a large quasi commercial development that has so many negative consequences for the environment.

**Response 3D.4:** The Equestrian Center has been removed as an element of the proposed project. Homes are now proposed in the area previously proposed for the Equestrian Center, but have been placed to allow a corridor surrounding the preserved watercourse/wetland system draining to Ulmar Pond.

The bulk of the area proposed to fall under a Conservation Easement has been officially characterized as having high conservation value, and includes Ulmar Pond, Clove Creek, all wetlands, all watercourses, and all the floodplain within the project site. It contains the highest value native vegetation associations, the highest value wildlife habitat, and the highest value wildlife corridors.

As depicted on the project plans, the closest proposed home to Ulmar Pond is 171 feet from its edge – about 71 feet beyond the regulated distance of 100 feet. All other development will be well in excess of 200 feet from any open water. The primary wildlife corridor between Clove Creek and Ulmar Pond is the connecting watercourse that drains Ulmar Pond to the Clove Creek, which will be untouched.

## D.2. Aesthetic or Visual Resources

**Comment 3D.5 (Osborn, NY/NJ Trail Conference):** I work for the New York New Jersey Trail Conference. We work to protect trails from erosion and trails -- protect them from overuse and improper use, and protect them from various other threats.

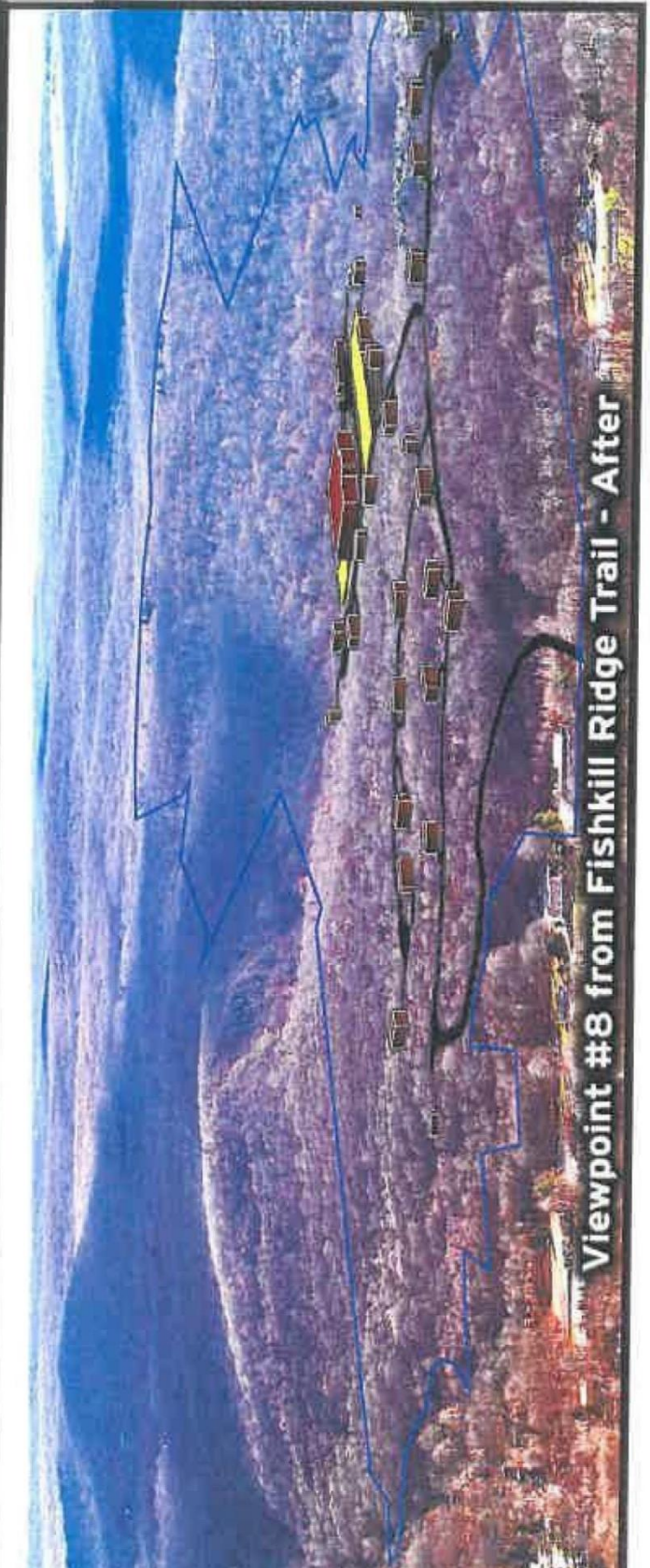
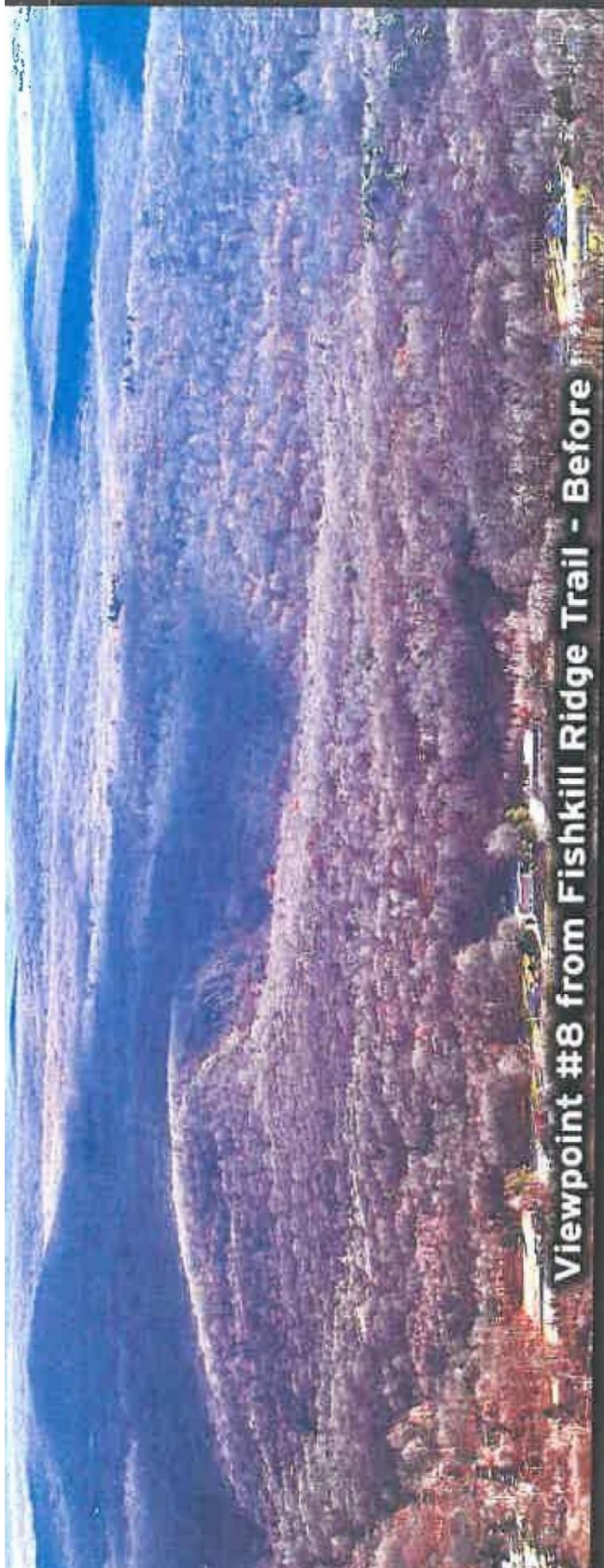
Have you ever been to the top of a mountain and seen a beautiful view, a beautiful view that features a single blemish in the middle of nature? The Hudson Highlands Reserve project site is directly east of one of the most popular parts of the state. The Hudson Highlands State Park includes the number one most popular day hike in North America, Break Neck Ridge. From the top of the ridge there is an amazing view to the east over rolling hills, over all of Fahnestock Park. There's nothing but green hills as far as you can see. There is some development along the Route 9 corridor, but it is all concentrated right along the road. All the hillsides above are completely undisturbed. The view is spectacular. You cannot tell where Fahnestock Park begins or ends.

The proposed development would be seen from that viewpoint and every other viewpoint along the Fishkill Ridge and Scofield Ridge. There are a total of 11 viewpoints. All of them look directly east across the green hills. The proposed development would be the only blemish or scar in every one of those 11 viewpoints. The houses will be clearly visible from the trails. The equestrian facility will take up far less of the view than the houses, but at 160,000 square feet, it is the same size as a Walmart Super Store which is 170,000 square feet. The proposed development will damage the views and damage the trail experience. We, at the trail conference, created a view shed analysis, and the data clearly shows that the development will not be hidden at all. I ask that a genuine view shed analysis be ordered.

**Response 3D.5:** The impact of the view from Scofield Ridge is discussed on page 135 of the DEIS, and depicted graphically in DEIS Figure 36. The existing conditions assessment in the DEIS found that no views to the proposed subdivision would be provided from Fahnestock State Park. In addition, a supplemental visual assessment from Scofield Ridge was conducted by the Project engineer in April 2021 and included as FEIS Appendix E. It is anticipated that only the entrance road from Route 9 will be visible from Scofield Ridge. To challenge the DEIS analysis, the commenter provides an analysis that is provided as a “before and after” set of graphics on the following page (Figure 15).

The “before” picture is a photo taken from the Fishkill Ridge Trail. It accurately depicts the existing view, which includes the developed landscape along Route 9. It also shows what appears to be unbroken forest from that point through to Fahnestock Park. The commenter states that “all the hillsides above are completely undisturbed.” This statement is, however, not true. Within this view are a multitude of homes, including those on East Mountain Road North, East Mountain Road South, Esselborne Road, Babbling Brook Lane, High Road, Stone Hill Road, Crest Road, Horton Road, Mill Road, and more. Due to topographic conditions and forest cover, none of these roads, nor the many homes located on them, are visible in this view. Possibly more importantly, three extant homes and an historic barn that currently stand on the project site are also hidden in this existing view from the trail. Not even Ulmar Pond is visible.





**Figure 15: NY/NJ Trail Conference View Graphic**

To the contrary, the “after” picture incorrectly depicts a proposed road system and structures drawn as if they are floating on the treetops, with no regard for topography or forest cover. Even though none of the existing roadways listed above are currently visible from the trail, this analysis suggests that every bit of the new roadway system would be seen. Each structure is also depicted as being seen from the foundation to the roof. The historic barn and the home that are being preserved, which are completely invisible in the “before” picture, are depicted in the “after” picture as now also being seen from foundation to roof. Obviously, this depiction is incorrect, and serves to illustrate the unreliability of this analysis.

In contrast, the visual impact analysis in the DEIS correctly takes into account lines of sight, topographic conditions, and tree cover, and analyzes the impact not only from Scofield Ridge (on the Fishkill Ridge Trail), but also from 12 separate points of view located in surrounding neighborhoods and roads. The proposed design seeks to preserve as many trees as possible on the lots surrounding the proposed residential units. The height of the proposed homes will be approximately 30 feet, well below the height of these trees and the surrounding preserved forest. The Equestrian Center has been removed as an element of the proposed project, and is no longer a factor in regard to visual impacts. As noted in the DEIS, construction of the entrance road will remove trees from the west-facing slope bordering Route 9, which will result in an unavoidable impact that will be visible from both Route 9 and Scofield Ridge, but this impact is minimized by its close proximity to other development along Route 9 that have already impacted this same viewshed. It is anticipated that other than the entrance road, the project will result in no adverse visual impacts.

**Comment 3D.6 (HHLT):** Community Character (Section IV.D of DEIS): The proposed site plan is one of a sprawling subdivision spread across the developable area of the property, and placing the undevelopable areas in a conservation easement. The DEIS does not include a visual analysis or simulation from Scofield Ridge or Fahnestock State Park as required in V.D.b.1 of the Final Scope. Rather, there only is a site-line (*sic*) illustration from Scofield Ridge. While DEIS Appendix T promises a viewshed analysis of nine scenic points along Scofield Ridge, those pages are missing from Appendix T and do not seem to be elsewhere in the DEIS. In any case, the viewshed document in Appendix T is from 2011 for a proposed soil mine and not for the proposed Conservation Subdivision. There is also no viewshed analysis from Fahnestock State Park, even though this area is specifically flagged in the Philipstown Natural Resources and Open Space Plan as being visible from trails in Fahnestock.

**Response 3D.6:** The sight-line illustration from Scofield Ridge is an accepted method of depicting a visual impact analysis. Figure M-1 in Appendix T graphically summarizes the viewshed impact within 5 miles. The additional figures are attached to this FEIS as Appendix E. These figures are somewhat misleading, however, in that they depict the potential area that may be visible from the studied vantage points, even if that involves only the top of trees. These graphics do not suggest in any way that a structure with trees preserved around it will be visible from these same points. The visual impact of the soil mine, which would have completely removed all the vegetation from the slope facing Route 9 and left a broad scar, would have been much more noticeable due to the nature of soil mining than the visual impact created by the proposed project. This analysis serves to illustrate the potential impact that could occur under an alternative use that is allowed under the current zoning.

The only portion of the project site potentially visible from Fahnestock State Park is the eastern portion of the property that would be preserved under the Conservation Easement. The proximity of this portion of the property to Fahnestock was one of the key reasons why this area is proposed to be preserved. Due to intervening topography, the area proposed for development cannot be seen from Fahnestock.

The characterization of the proposed project as “a sprawling subdivision spread across the developable area of the property” doesn’t take into account the context of the surrounding preserved land. Any land development is going to directly adversely impact the immediate portion of the land being developed. The point of clustering development, however, is to limit the impact to a portion of the property and preserving the rest. In this case, only 38.1 acres, or 18.1% of the property, are proposed to be disturbed, and 163 acres, or 77.6% of the property will be permanently preserved in a natural state.

**Comment 3D.7 (HHLT):** The Final Scope called for a visual analysis of the subdivision from both Scofield Ridge in Hudson Highlands State Park and from Fahnestock State Park (Final Scope V.D.1.b.). No such visual analysis is provided in the DEIS. Rather, DEIS Page 136 shows a site-line illustration between Scofield Ridge and the proposed development, but does not show what the development would look like from Scofield Ridge – i.e. a visual simulation. Appendix T includes an old visual study for a soil mine from 2011, but nothing specific to this Conservation Subdivision. The visual study in Appendix T references Exhibits M4 – M12 with the viewshed analysis for nine viewpoints on hiking trails along Scofield Ridge, but those pages are not included in Appendix T of the DEIS (only Exhibit M1 is included). Therefore, the DEIS does not appear to include any viewshed analysis or visual simulations along Scofield Ridge. Even if it did include the old analysis from the mining project, it would not be suitable to reflect the visual impact of the Conservation Subdivision.

**Response 3D.7:** The DEIS Scoping Document adopted by the Planning Board provided an outline for assessing visual impacts as follows:

*1. Existing Conditions*

- a. Identify existing pattern and scale of development surrounding the site and within 1/4 mile of the site.*
- b. Identify any aesthetic or visual resources on the site and within 1/4 mile of the site, including views from Scofield Ridge and Fahnestock State Park.*

*2. Anticipated Impacts*

- a. Potential conflicts with neighboring pattern and scale of development.*
- b. Potential aesthetic, visual, or other impacts related to the proposed location of homes and size of the proposed equestrian center.*

Rather than calling for “a visual analysis of the subdivision from both Scofield Ridge in Hudson Highlands State Park and from Fahnestock State Park,” the Scoping Document requires under an “Existing Condition” the identification of “any” aesthetic or visual resources on the site or within 1/4 mile of the site, including as may be seen from Scofield Ridge and Fahnestock State Park. The discussion of these existing conditions is provided as required in the DEIS, including the view from Scofield Ridge. No such views exist from Fahnestock State Park, and accordingly, none were identified in the DEIS.



The Project Sponsor believes the assessment of Anticipated Impacts does not, contrary to the statement in Comment 3D.7, require a specific type of visual impact analysis from Scofield Ridge, Fahnestock State Park, or any other point. Neither does it require any analysis from a point if no view from that point is identified. As the potential for a visual impact was identified in the existing condition, an analysis of the visual impact from Scofield Ridge was provided in the DEIS. Contrarily, as no existing condition view from Fahnestock was identified, likewise, no impact assessment was necessary.

The Scoping Document is silent on the form in which the visual impact assessment was to be presented, and as such, a “visual simulation” from Scofield Ridge was not required. The sight-line cross-section provided is a long accepted method of presenting this type of analysis.

**Comment 3D.8 (HHLT):** Furthermore, no visual analysis from Fahnestock State Park is included, even though the Philipstown Natural Resource and Open Space Plan specifically calls out visual impact of this area as one reason why it was identified in the Open Space Inventory, as Area 17: East Mountain (Natural Resource and Open Space Plan Page 9). The rationale for including the area proposed for Hudson Highlands Reserve in the town’s Open Space Inventory reads as follows: *“Within the Clove Creek watershed, this area includes residential parcels accessed from East Mountain Rd North and South, Esselborne Rd, and Horton Rd. The ridge is visible from Route 9 and from trails in Clarence Fahnestock State Park.”* (Open Space Index Page 4.)

**Response 3D.8:** The quote provided from the Open Space Inventory does not suggest that the entirety of the East Mountain area is visible from the trails in Fahnestock State Park, but rather that “the ridge” is visible. While “the ridge” is not defined or described, this phrase likely refers to the higher elevations above 800 feet, which is contained within the eastern portion of the property that would be placed under a Conservation Easement. Any proposed development on the property would be below an elevation of 500 feet, with some under 400 feet, and located on the downslope side of “the ridge” away from Fahnestock State Park. The views from Fahnestock would therefore be unaffected and, in fact, protected as a result of the proposed project.

**Comment 3D.9 (Scenic Hudson):** The draft environmental impact statement (DEIS) does not take into account visual impact from Scofield Ridge, asserting that views from these trails are unimportant and described as “distant views...and...seasonally available to all but the hardest of hikers who might visit the ridge in the winter.” This is not the case. The Wilkinson trail is mapped and maintained by the NY-NJ Trail Conference and Scofield Ridge is increasingly popular amongst hikers, even during leaf off conditions late fall through the spring.

**Response 3D.9:** The impact of the view from Scofield Ridge is discussed on page 135, and depicted graphically in Figure 36. In addition, a supplemental visual assessment from Scofield Ridge was conducted by the Project engineer in April 2021 and included as FEIS Appendix E. It is anticipated that only the entrance road from Route 9 will be visible from Scofield Ridge.

**Comment 3D.10 (AKRF):** Page 135: Similar to how other viewpoints are presented graphically in this section of the DEIS, a panoramic photograph depicting the view of the project site from Scofield Ridge should be incorporated into the FEIS to accompany the plan and profile section diagram already included in DEIS Figure 36. The text included in the third paragraph of page

135 is not fully supported by the plan and profile section drawing, and inclusion of a panoramic photograph of this viewpoint would provide further context for the lead agency to draw conclusions. This issue has also been raised as a concern during the public hearing.

**Response 3D.10:** Badey & Watson dispatched a field crew to the top of Scofield Ridge to photograph Route 9 and Hudson Highland Reserve (HHR) site. Badey & Watson also utilized Google Earth by projecting the proposed roads, the proposed and existing houses and driveways, the outer property line and the limit of disturbance onto the Google Earth Images. Care was taken to assure that the HHR data was inserted at its correct geographic location to help visualize the potential impacts that construction of the subdivision might have on the views from hiking the trails on Scofield Ridge. Two camera locations were selected because they presented wide panoramic views that included the HHR project area. The camera positions are labeled HHR camera location N and HHR camera location S, on Appendix E, which also Thalle Industries, a rock quarry, to the north, to Glassbury Court, a 90 +/- unit residential development, to the south of the proposed HHR Conservation Subdivision.

From the images found in Appendix E, it can be determined that, although there will be portions of the proposed entrance road and portions of some of the proposed houses visible from Scofield Ridge, the majority of the disturbance will be shielded from view by the topography of HHR and the trees that are to remain between Route 9 and the construction within HHR.

It is noted that the quarry at Thalle and the soil mine Century Aggregate, to the North, and Glassbury Court, to the South, dominate the Route 9 Corridor. The mountains further East are dappled with existing houses. As the graphics show, most of the roads and houses to be constructed in the HHR Conservation Subdivision will be hidden from view due to the topography of the site and the location of the development within the site. The small glimpses of houses or roofs will do little to change the overall characteristic of the viewshed.

In order to mitigate potential visual impacts of HHR when viewed from points to the west, including Scofield Ridge, the project sponsor will require that the following measures be taken.

- a. Selective tree cutting on residential lots to accommodate the placement of homes in a forested setting (no clear cutting will be permitted);
- b. Planting of new trees along the Route 9 access road to provide screening; and
- c. Use of natural colors/earth tones for building materials including siding and roofing.

**Comment 3D.11 (Chester):** It sounds like all the buildable land, (I am not sure 45 acres?) is going to be a "clear cut" all the trees will be cut down. I'm assuming that all around the houses and horse area, ALL the trees will be removed. Since this is an HOA, I don't believe that any of the owners can plant trees and NEVER will there be a tree canopy to hide the subdivision from the vista points.

**Response 3D.11:** The area of potential disturbance has been reduced from 45 acres to 38.1 acres. Except for what may be necessary within the proposed road rights-of-way and the septic system areas, clear cutting will not occur on site. The Project Sponsor has represented that trees will be cut selectively on residential lots with the intention of nestling the proposed homes within a forested setting. The Project Sponsor's current schematic designs for the new homes do not exceed three (3) stories above grade. Based on standard design and construction practices for a single family home the roof line will be between thirty-six (36) and forty (40) feet

above grade. The Project Sponsor has provided HOA regulations requiring that site plans for all construction be approved by its Architectural Review Board. Approval of the project will be conditioned upon these regulations being adopted and adherence to them being a condition of ownership. While the rules discourage the planting of non-native species, they fully allow the planting of native trees and plants. The Equestrian Center has been removed as an element of the proposed project and therefore there is no longer a need to clear cut for the large equestrian center building, paddocks and parking field. Philipstown's Zoning Code requires site plan approval for any residential building with a footprint that exceeds 3,000 square feet. These requirements regulate landscaping and will serve to further prevent any clear cutting on private lots. Philipstown Zoning also limits the height of buildings to 40 feet or 3 stories. The forest, which contains many trees that exceed this height, will also serve to screen the project from view.

**Comment 3D.12 (Rauch):** Nowhere does the Applicant show concern for the impact that the proposed equestrian facility will have on scenic views from parklands controlled by New York State. Much of the land in those parks was donated to the State by citizens who believed that its scenic beauty would be zealously protected for future generations to enjoy. The Applicant has taken no measures to assess the impact that his "conservation subdivision" would have on that enjoyment. Surely, visual simulation, including balloon tests, should be required to demonstrate what damage to the scenic value of the protected land would ensure from construction of the equestrian facility.

**Response 3D.12:** The Equestrian Center has been removed as an element of the proposed project.

#### IV. ALTERNATIVES

**Comment 4.1 (AKRF):** The proposed site plan resembles large-lot residential and should be further reduced in footprint to constitute a true cluster subdivision. With a community septic system, as is proposed, it appears that significantly more centralization/consolidation, i.e. more cluster, could be achieved than is proposed at present. Such consolidation will undoubtedly improve habitat preservation in-line with the identified conservation values of the land as explored in the Conservation Assessment and DEIS. The proposed Alternative D, Cluster Subdivision with 1/2 acre lots, offers some benefit by preserving more of the terrestrial-aquatic habitat linkages by eliminating houses around Ulmar Pond and eliminating one of the two drives off Horton Road, but does not substantially reduce impacts to the onsite habitat overall and adds a longer cul-de-sac extending northeastwards. A cluster layout alternative more protective of onsite habitat is warranted.

**Response 4.1:** The Project Sponsor believes that HHR meets the provisions of the Town Code, which a large variety of lot sizes. The minimum lot size in the Rural Residential (RR) District is 3 acres, and 5 acres within the Open Space Conservation Overlay District (OSO). Reducing the proposed lot size to one acre (below the minimum required in the RR zone and OSO overlay) while setting aside 163 acres, or 77.6% of the project site for conservation is what the Project Sponsor is proposing to meet the Town Code's definition of a conservation subdivision. Reducing the lot size further from one acre would adversely lower the value of each residential unit and seriously threaten the financial viability of the project, and there is no requirement in the Zoning Code to do so. As the Equestrian Center has now been removed as an element of the proposed action, the proposed layout has become more consolidated, and further increased the preservation of undisturbed habitat over what had been previously proposed.

**Comment 4.2 (AKRF):** The following components of the proposed site plan should be reconsidered to reduce the site plan's ecological impacts:

- a. Emergency access roads to north connecting with East Mountain Road and two roadways to south connecting with Horton Road appear redundant, and fragment the oak-dominated uplands from the more mesic, lowland forest and wetlands/streams to the south/west. Removing two of these roadways, most critically the southern drives that sever the connection between upland and wetland, is advised to retain critical movement of animals between aquatic and terrestrial habitats.
- b. Onsite roadways need animal crossing tunnels (box culverts) especially at stream/wetland crossings to facilitate movement of animals from uplands to downslope wetlands. Similarly, such features as Cape Cod Curbing to reduce reptile/amphibian mortality is advised.
- c. Lots 24, 25, 18, and 19 should be moved/removed/consolidated to preserve connectivity between Ulmar Pond and surrounding upland habitat.
- d. Lots 13, 14, 15, 16, and 17 should be moved/removed/consolidated to protect less-disturbed, oak-dominated forest and reduce forest fragmentation.
- e. Lots 9 and 10 should be moved/removed/consolidated to protect oak-dominated rocky spine exhibiting potential timber rattlesnake and/or copperhead foraging habitat identified by Coleman.

- f. The Equestrian Center and its parking/amenities should be moved more centrally (northwestwards) to widen the habitat corridor between upland and wetlands (and Ulmar Pond)

**Response 4.2:** a. The two roadways connecting to Horton Road are pre-existing. There are no plans to improve them as part of this project. Otherwise, they will remain as is. The roadway that is part of the historic road will be permanently blocked. The other roadway will have a locked gate with a Knox Box containing a key available to emergency service providers to serve as an emergency access. The roadway connecting to East Mountain Road North is also pre-existing as a driveway that served a residential structure that is still standing. It is also part of the historic road. It will likewise remain unimproved, except for some regrading to get the emergency access below a 12% grade, and will have a locked gate and Knox Box with key available to emergency service providers to serve as an emergency access. As neither would be used except in the case of an emergency, there would be no impact on wildlife.

b. The project does not involve any new stream or wetland crossings. The emergency road access road that connects the end of Reserve Road to Horton Road, crossing over a braided stream/wetland system, already exists. It is a gravel road built several years ago by a previous owner. It was built under the Open Development Area roadway standards, which is used extensively throughout Philipstown. The road is built with little grading beyond that necessary to shape the road. There are no curbs. Because this roadway will only be used for emergency services, it will be used very infrequently. Because it will be used infrequently, there is little, if any threat of animal/amphibian mortality and requiring crossing tunnels is not necessary in this area. The remainder of the road system, except for the entry road from Route 9 is designed in accordance with the Town Road standards, without curbs. If the entry road from Route 9 is constructed, the applicant will be required to substitute "cape cod" or mountable curbs instead of the standard curbs in this area. The need to provide crossing tunnels along Highland Trail is apparent in the vicinity of station 2+50, 11+00 and 20+00. The applicant will be required to show crossings at these stations on their final plans.

c. The revised plan eliminates previously proposed lots #23, 24 and 25 as shown in the DEIS layout. Lot #18 is a pre-existing historic house and cannot be removed. There is no benefit to removing lot #19. Access to 100% of Ulmar Pond will be maintained through the preservation of a 140-foot buffer. Residential units will be developed around the northern half of the pond behind the buffer. No development will be placed at all around the southern half on the pond. The greatest degree of wildlife connectivity to Ulmar Pond will occur via the watercourse/wetland inflow into the pond and via the outflow, both of which will be fully preserved.

d. With the elimination of the Equestrian Center, the cul-de-sac serving previously proposed lots #15, 16, and 17 has been significantly shortened, and proposed lot #16 has been eliminated.

e. As documented by herpetologist Randy Stechert, the potential use of the property by timber rattlesnakes for foraging is nearly nonexistent. The location of the talus slope copperhead habitat suggested by Coleman was nowhere near previously proposed lots #9 and 10. The only identified talus slope is located offsite (see Response 3B.5), and the species itself has no protective status. In the revised plan, however, previously proposed lot #10 has been relocated due to its encroachment into the area characterized as having high conservation value, and

proposed lots #8 and #9 have also been relocated. The cul-de-sac in this area has also been greatly shortened, opening up an additional area for preservation under the Conservation Easement.

f. The Equestrian Center has been removed as an element of the proposed action, but proposed homes have now been moved into this area. The stream, wetlands, and wetlands buffer in this area were not proposed to be disturbed under any version of the proposed project. Likewise, they will not be disturbed if the most recent version of the proposed plan is approved. The shortening of Reserve Road, shown on the most recent plan and discussed in Response 4.2b above, resulted in moving the project elements further from the wetlands buffer line. The result is an increase in separation between the wetlands buffer and a corresponding widening of the wildlife corridor being preserved. The following table compares the distances from the wetland buffer, to the nearest proposed pavement, bio-area and building in the vicinity of the end of Reserve Road with the proposed plan contained in the DEIS.

Table 13			
Design Version	Distance Between Wetland Buffer and Nearest Proposed		
	Pavement	Bio Area	Building
With Equestrian Center	45 feet.	40 feet	135 feet
Without Equestrian Center	165 feet	92 feet	145 feet

**Comment 4.3 (AKRF):** ALTERNATIVES Similar to the conclusive statements in terms of project viability for Alternatives A, C, D, and E, Alternative B should include a conclusive statement on whether this alternative is economically viable or not and what the environmental impacts would be. A few sentences would suffice, however this comparison is crucial for readers when evaluating the different alternatives and their impacts in comparison with each other.

**Response 4.3:** A conventional subdivision would produce larger lots with odd shapes and difficult access. This increases development costs. Longer roads will be required in order to access all lots. At the same time, this would demand longer utility runs which will increase overall costs.

Revenues would also be decreased as the property values would be negatively affected. A significant portion of the development's value hinges on the notion that parcels within a conservation subdivision with environmentally responsible design guidelines hold more monetary value than parcels within conventional subdivisions. As the sales from a conventional subdivision are also typically limited to undeveloped lots rather than homes, the prospective buyers will also need to build their own driveways (which would be longer than with a clustered subdivision), pay for the installation of infrastructure and utilities to the street, and install their own septic systems. These requirements will depress the price of the land, and limit the potential profitability of the project. Finally, the reduction of the lot count to 19 greatly reduces the potential economic viability of the project. The Project Sponsor's current financial

projections show, given expenditures to date and expected expenditures, that 24 lots will allow only for a nominal profit.

The increased development costs, reduced projected revenue, and reduction to 19 lots will make the project financially infeasible. This alternative also does not meet the objectives of the Project Sponsor, a consideration recognized in the SEQRA regulations (see 6 NYCRR Section 617.9).

**Comment 4.4 (AKRF):** In Alternative D, the applicant states that, "the lot size would be reduced from around one acre to one-half acre...the area of disturbance would be reduced to 42.8 acres from 45.7 acres, thereby reducing the overall environmental impact from the project by just 2.9 acres...the amount of impervious surfaces would also be reduced to approximately 8.6 acres, or just about 2.5 acres less than the current proposal." There is barely a difference between the Alternative D cluster subdivision, with smaller lots and relocation of homes, and the proposed plan. The definition of a cluster development, as stated in Town Code Section 175-11, is a development that "clusters in nodes surrounded by open space and, where practical, in the traditional compact pattern found in the Town's hamlets." Clustering is intended to help create smaller, more compact development in areas away from environmental constraints, and is a planning technique often used to preserve open space. Here, the clustering only shows a 2.9-acre reduction in environmental impact and a 2.5-acre reduction in impervious surfaces, both of which should reflect larger reductions. AKRF does not agree that Alternative D qualifies as a cluster subdivision, as it does not show the elements of proper clustering to qualify. The Applicant should create a proper cluster subdivision that reflects the principles of 'clustering' and a larger preservation of open space.

**Response 4.4:** It is not surprising that there is little difference between Alternative D and the previously proposed preferred plan as this compares one cluster plan to another. Both were designed, as the commenter states, to avoid environmental constraints and to preserve open space. While there would be some gains by reducing lot size, certain factors, such as the size of the proposed units and the long entrance road won't change. Most of the gain comes from a relatively minor reduction in roadway.

Both cluster layouts meet any "proper" definition of clustering, including, most importantly, that as dictated by the Zoning Code, which as stated by the commenter "clusters in nodes surrounded by open space and, where practical, in the traditional compact pattern found in the Town's hamlets." According to Wikipedia, the hamlets in the Town of Philipstown include Continental Village, Forsonville, Garrison, Glenclyffe, Graymoor, Manitou, North Highland, and South Highland. Of these, Glenclyffe and Graymoor are primarily institutional in nature and not true hamlets. The average lot size in Continental Village is far less than what is proposed for the project. The average lot size in North Highland is generally right around one acre, precisely as proposed for Hudson Highland Reserve. The average lot size in the hamlets of Forsonville, Garrison, Manitou, and South Highland are all much larger, typically multiple acres per home, and therefore greater than what is proposed. Therefore, only the Continental Village hamlet has smaller lot sizes than what is proposed for this project, which would be far more compact than the majority of the hamlets in Philipstown.

Not included in the list of hamlets is the Horton Road/Horton Court/Mill Road neighborhood adjacent to the proposed project. The typical lot size in this neighborhood ranges from around

an acre to multiple acres. The proposed lot size is therefore also completely compatible with the adjoining neighborhood.

**Comment 4.5 (AKRF):** Alternative D assumes the loss of potential value of homes. How are the projections of potential loss of value percentages derived? The FEIS should provide calculations or a basis for the projections. The Applicant states that, "based on the projected asking prices for the lots around Ulmar Pond and those elsewhere in the proposed subdivision, it is estimated by the Project Sponsor that the impact on the potential value of the homes removed from around Ulmar Pond would be a loss of about 65%. Based on the asking price the Project Sponsor would place on a half-acre lot compared to the one-acre lots, the loss of potential value for the other homes is projected to be about 40%." Other than stating that the Project Sponsor estimates these numbers, the text has not provided calculations or a basis for the projections for these values. Please provide the calculations, and research behind these projections in an Appendix and reference them within the text.

**Response 4.5:** Since the time of this hearing, the Project Sponsor has updated their comp numbers to reflect the current sales market in the area. Based on the recent COVID-19 health crisis, home prices have fluctuated greatly. The premium between waterfront properties and non-waterfront properties has decreased as the demand for housing stock has driven overall prices higher. However, a difference still remains. The Project Sponsor plans to price the six parcels around the pond approximately 40% higher than the other parcels, and believes the potential loss of the units around the pond would remain a significant financial impact to the project. A comp sheet to support this price differential is provided as Appendix F.

**Comment 4.6 (AKRF):** Alternatives B, D, and E require a fiscal analysis for the residential development, similar to what has been provided for the equestrian facility in Alternatives C and E. It is important for readers to know how much projected revenue will be generated from these different alternatives given the varying scenarios with and without the equestrian facility. Please provide the fiscal analysis for each alternative in an Appendix and reference these findings within the FEIS.

**Response 4.6:** A fiscal analysis as suggested is not required. The Project Sponsor refers to the Scoping Document that provides the following description for the alternatives analysis:

*"SEQR mandates that environmental impact statements analyze a reasonable range of alternatives to the action that are feasible, considering the objectives and capabilities of the project sponsor. Those analyses must include a description of the impacts (adverse, beneficial, long and short term, cumulative) created by the alternatives, as well as their probability and significance in comparison to the proposed action. The alternatives should be analyzed qualitatively, except where project impacts can be compared in quantitative analyses."*

The analysis provided for alternatives need not focus on issues not required for study by the Scoping Document for the proposed project. The Scoping Document does not require any kind of fiscal analysis at all. The alternatives analysis provided in the DEIS, however, went beyond the requirement to address the fiscal impact of the project on taxes. The commenter is requesting that the analysis go even further, and provide a detailed assessment of the relative profitability of the residential alternatives. An analysis of the relative profitability of the residential portion of the proposed project or the alternatives is not required by the Scoping



Document in any way. As a smaller Equestrian Center had been a significant topic of discussion, the Project Sponsor took a serious look at the economic viability of a smaller equestrian center to see if that was a reasonable alternative to consider. As a detailed study was prepared and was therefore available, it was decided to provide it in the DEIS in the interest of transparency, even though there was no requirement to do so. It should be again noted here that the Equestrian Center is no longer included as an element of the proposed project.

**Comment 4.7 (Conner):** In several places in the DEIS, the applicant refers to "commercial taxes generated by the equestrian center".

Please explain specifically what commercial and other tax revenue would be generated by the equestrian center.

**Response 4.7:** The Equestrian Center has been removed as an element of the proposed action.

**Comment 4.8 (HHLT):** We believe a site plan can be constructed so that all of the five (5) houses on the western side of the pond can be relocated away from the pond, where most of the other houses are, while still maintaining 1-acre size lots. We engaged LandVest, Inc. to draft a conceptual plan of how 24 houses could all be located away from the pond on 1-acre lots and this configuration is shown in Exhibit E. We note that they relied only on publicly available information and did not visit the site. In addition, we think the equestrian facility can be reconfigured to move the trailer parking, in order to facilitate a wider corridor between the eastern slopes and the pond.

**Response 4.8:** The LandVest layout ignores the Conservation Values map that was adopted by the Planning Board, and proposes an additional cul-de-sac and homes in areas of medium and high conservation value, including highly constrained areas of excessively steep slopes. Under the requirements in the Zoning Code for Conservation Subdivisions, this layout is not viable.

**Comment 4.9 (HHLT):** Remove the five houses on the West Side of Ulmar Pond and relocate them to be clustered with others to the northwest side of the property. This will preserve the wildlife corridor between Clove Creek and Ulmar Pond, place the conservation easement on contiguous protected land, and help mitigate impacts on NY Species of Special Concern.

**Response 4.9:** The wildlife corridor between Clove Creek and Ulmar Pond is coincident with the outlet from Ulmar Pond that eventually discharges to Clove Creek. The houses on the west side of Ulmar Pond do not impact this wildlife corridor, and their removal will do nothing to mitigate impacts on any NY Species of Special Concern. Nevertheless, the number of proposed new homes around the western side of Ulmar Pond has been reduced from five to two in the newly revised plans. This will allow a better unbroken connection between different parts of the proposed Conserved Land subject to a Conservation Easement within the property boundaries.

**Comment 4.10 (HHLT):** While the DEIS says that moving a house away from the pond reduces its value by 65% (DEIS Page 145), the freeing up of most of the pond area for common passive recreational use by all residents will likely increase the value of all houses in the subdivision significantly, potentially offsetting this impact.

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**Response 4.10:** As proposed, the entirety of Ulmar Pond, with no less than a 140-foot buffer around it, will be included within the Conserved Land. This land, including Ulmar Pond, will be owned by the HOA and will be available for passive recreational use by all residents. Moving houses further away from Ulmar Pond will not change these circumstances in any way. Nevertheless, the number of proposed new homes around Ulmar Pond has been reduced from seven to four in the newly revised plans.

**Comment 4.11 (Scenic Hudson):** As proposed, the applicant's preferred alternative, Alternative E, is inconsistent with provisions in Philipstown's conservation subdivision zoning code. Further, it would result in significant environmental impacts with respect to biodiversity and habitat connectivity, water quality and aquifer protection, and adverse visual impact from the Wilkinson Trail on Scofield Ridge. It is crucial that these impacts and inconsistencies are taken into consideration when making a decision.

**Response 4.11:** The preferred plan at the time of the DEIS was a residential subdivision with an equestrian center. As the size of the equestrian center was a concern of the Lead Agency and the public throughout the SEQRA process, Alternative E was included as part of the adopted DEIS Scope that reduced the size of the equestrian center. Alternative E was not the Project Sponsor's preferred plan. As the DEIS concluded that the preferred plan would not have resulted in significant adverse impacts with respect to diversity and habitat connectivity, water quality, aquifer protection, visual impact from Scofield Ridge, the same would apply to the very similar Alternative E. The revised plans now being submitted, which removes the Equestrian Center in its entirety, relocates homes from the west and south sides of Ulmar Pond, shortens three of the proposed subdivision roads, and relocates proposed homes from the center of the property, will further reduce any potential for adverse impacts.

**Comment 4.12 (Scenic Hudson):** Scenic Hudson disagrees with the applicant's assertion (page 141) that removing the five homes from the pond's west side and reducing impervious area (by 2.5 acres) and disturbed area (by 2.9 acres) is inconsequential. Any removal and reduction of impervious and disturbed area is consequential, and consequently decreases the perimeter of the development. This results in a smaller amount of lower-quality edge habitat that would drive away species that rely on large areas of contiguous forest.

**Response 4.12:** See Response 4.11. Changes in the revised plans being submitted reduces the number of proposed homes around the western side of Ulmar Pond from five to two. The revised plans reduce the amount of impervious surfaces by approximately 3.4 acres, and the area of disturbance by 7.6 acres. The DEIS does not make an assertion that the reduction of impervious surfaces and disturbed area is "inconsequential". The revised project plans, however, achieve an even greater reduction. The Project Sponsor has also concluded that the potential revenue would be impacted to the point that the project would become unprofitable. In that the success of the project would enable the permanent preservation of 163 acres of mostly high conservation land, including wetlands, watercourses, floodplain, and Ulmar Pond, the failure of the project would therefore have its own environmental impact in that this land would not be permanently preserved.

## V. ADVERSE ENVIRONMENTAL IMPACTS THAT CANNOT BE AVOIDED

**Comment 5.1 (AKRF):** According to Chapter 5 Section C.35 of the SEQR Handbook, "certain adverse environmental impacts can be expected to occur regardless of the mitigation measures employed; for example, there is typically permanent loss of vegetation when building a new facility and any related parking. Because such unavoidable impacts must be factored into final agency decision making, the SEQR regulations provide that an EIS must contain an identification and assessment of impacts that cannot be avoided or adequately mitigated. The discussion of unavoidable impacts must meet the same substantive requirements as all other discussions of impacts and alternatives." For example, the applicant should note a permanent loss of 11.1 acres of existing vegetation, instead of 'removal of 45.7 acres of existing vegetation of which 34.6 acres would be replaced with lawn and landscaping.' The applicant should review the bullets listed in the DEIS, and include just those from each section of the DEIS where impacts are unavoidable and where the proposed mitigation will be unable to offset the unavoidable impacts. In addition, the FEIS should specify which adverse environmental impacts cannot be avoided in the short-term versus long-term. This comment was previously included as part of AKRF's completeness review memo and has not yet been addressed.

**Response 5.1:** During the completeness review, the commenter provided a comment that read "*The pDEIS needs to specify which adverse environmental impacts cannot be avoided in the short-term versus long-term.*" This comment was addressed in drafting the DEIS by classifying impacts as "temporary" or "permanent", and was found at that time by the commenter, working on behalf of the Town, to be an acceptable response. The remainder of this comment was not provided at that time.

The wording in the example given is an accurate expression of an adverse impact that cannot be avoided. Considering the layout as originally proposed, it was calculated that 45.7 acres of existing vegetation would be removed. Under the revised plans, that number has been reduced to 38.1 acres, of which 30.4 acres would be replaced with new native vegetation. The Project Sponsor acknowledges that the 30.4 acres of landscaped vegetation is not an equal substitute for the natural vegetation that would be removed, and as such noted within the DEIS that this represents an alteration/degradation of this amount of vegetation as wildlife habitat, which is also a permanent unavoidable impact.

The Project Sponsor believes the remainder of the bulleted list from the DEIS represents an accurate summary of the unavoidable adverse impacts that would result from the proposed project. However, since the site plan has changed between the DEIS and FEIS, so have some of the quantified figures from the list. The current list of unavoidable impacts is summarized as follows:

- Temporary disturbance of on-site soils during the course of development.
- The introduction of an additional 6.7 acres of impervious surfaces and alteration of stormwater runoff.
- The permanent loss of 6.7 acres, and the alteration/degradation of 30.4 acres, of existing wildlife habitat.
- Creation of an access from Route 9 and permanent generation of additional traffic.
- A permanent increase of approximately 17,700 GPD of groundwater withdrawal.

- The generation of a similar amount of wastewater to a common onsite sewage disposal system.
- The permanent foreclosure of an opportunity for the extraction of sand and gravel resources.

**Comment 5.2 (AKRF):** The FEIS should separate the adverse environmental impacts in bullet points into topics or categories and expanded upon why they are unavoidable. This comment was previously included as part of AKRF's completeness memo and has not yet been addressed.

**Response 5.2:** See Response 5.1 for the bulleted list. This is a more expanded discussion:

Any development of a naturally vegetated property will have adverse impacts that cannot be avoided. Some of these are short-term impacts that would occur primarily during the construction phases. There are, however, other adverse impacts that would have permanent or long-term environmental effects. Most of these are an unavoidable consequence of the site development process.

As a mostly undeveloped vegetated property, development will require the removal of existing vegetation. Of a projected 38.1 acres of vegetation removal, approximately 30.4 acres would be replaced with lawn and landscaping. The remaining 7.7 acres would be replaced with impervious surfaces such as roadways, driveways, and structures, which will increase the amount and rate of stormwater runoff prior to stormwater management controls. This also translates to the permanent loss of 6.7 acres, and the alteration/degradation of 30.4 acres, of existing wildlife habitat. The project will require the temporary disturbance of on-site soils during the course of development. The 6.7 acres of new impervious surfaces will represent a permanent disturbance of those soils.

The project will require the creation of an access from Route 9 and permanent generation of additional traffic.

The project will also create a permanent demand of approximately 17,700 GPD of groundwater withdrawal from onsite resources, as well as the generation of a similar amount of wastewater to a common onsite sewage disposal system.

Development of the property will preclude the future use of the property for any other purpose, especially through the imposition of a permanent Conservation Easement, including the permanent foreclosure of an opportunity for the extraction of sand and gravel resources as was previously proposed for this property.

## **LIST OF APPENDICES**

<b><u>APPENDIX A</u></b>	Public Hearing Transcript, dated June 20, 2019
<b><u>APPENDIX B</u></b>	Written Comments - Public & Interested/Involved Agencies
<b><u>APPENDIX C</u></b>	Revised DEIS Figures
<b><u>APPENDIX D</u></b>	Vernal Pool Investigation, dated April 26, 2019
<b><u>APPENDIX E</u></b>	Visual Impact Analysis from Schofield Ridge
<b><u>APPENDIX F</u></b>	Real Estate Comparatives Analysis, Waterfront vs. Non-Waterfront Properties
<b><u>APPENDIX G</u></b>	Additional References Supplementing the 1998 Lathrop Paper
<b><u>APPENDIX H</u></b>	Preliminary Stormwater Pollution Prevention Plan
<b><u>APPENDIX I</u></b>	Preliminary Plan Set prepared for Hudson Highlands Reserve, Prepared by Badey & Watson, P.C, (no revisions to plans, see previously provided plans)

**APPENDIX A**  
**PUBLIC HEARING TRANSCRIPT,**  
**DATED JUNE 20, 2019**

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STATE OF NEW YORK: COUNTY OF PUTNAM  
TOWN OF PHILIPSTOWN PLANNING BOARD

-----X

PUBLIC HEARING IN THE MATTER OF:  
HUDSON HIGHLANDS RESERVE  
ROUTE 9 AND HORTON ROAD

-----X

June 20, 2019  
VFW Hall  
34 Kemble Avenue  
Cold Spring, New York  
7:34 p.m.

**BEFORE:**

ANTHONY MERANTE, Chair  
KIM CONNER, Vice Chair  
PETER LEWIS, Member  
NEAL TOMANN, Member  
DENNIS GAGNON, Member  
NEAL ZUCKERMAN, Member

**PRESENT:**

RONALD GAINER, Town Engineer  
STEPHEN GABA, Town Attorney  
TARA K. PERCACCILOLO, Clerk

**FOR THE APPLICANT:**

RICHARD L. O'ROURKE, ESQ.  
KEANE & BEANE, P.C.  
445 Hamilton Avenue, Suite 1500  
White Plains, New York 10601

STEPHEN M. GROSS, Consultant  
AARON WERNER, AKRF

Douglas F. Colavito, Court Reporter



## HUDSON HIGHLANDS RESERVE

1           MR. MERANTE: I'm going to read the public  
2 hearing notice for the Hudson Highlands  
3 Reserve. I'm going to read it. Basic  
4 information.

5           It's a 210 acre tract on six separate tax  
6 parcels located on the east side of Route 9  
7 between Horton Road and East Mountain Road  
8 North. And this -- the rest of that paragraph  
9 just gives you the -- you know, location  
10 details. It's in an open -- open space overlay  
11 district. And -- most westerly part of the  
12 tract is frontage along Route 9 and located in  
13 an industrial manufacturing zone.

14           The remainder of the property is 4.5 acres  
15 -- is located in a highway commercial zone  
16 along Route 9. The application for preliminary  
17 approval is being processed as a conservation  
18 subdivision pursuant to the standards contained  
19 within Paragraph 175-20 of the zoning  
20 ordinance. A minimum of 154 -- 154-acres of  
21 the overall tract is proposed to remain  
22 undeveloped and protected as open space. The  
23 applicant seeks preliminary approval in the  
24 subdivision. It includes 25 residential lots,  
25 each containing approximately 1 acre. The 25

1       lots will be serve -- served by individual  
2       wells and community waste water treatment  
3       facilities. An equestrian center is also  
4       proposed. It's 4.5-acre parcel which is  
5       improved with office building. An office  
6       building will remain a separate smaller lot,  
7       making room for the proposed access road. And  
8       that's the abbreviated essential part of the  
9       public notice.

10               I do want to make a couple of statements  
11       -- statements about conduct of the meeting.  
12       And on May 16th, the planning board determined  
13       to draft an environmental impact statement; so  
14       it's complete for public review and comment.  
15       The DEIS exams the nature and extent to  
16       identify potential environmental impacts, as  
17       well as steps which can be taken to minimize  
18       and avoid adverse impacts. Written comments  
19       will be accepted until July 8th to the planning  
20       board. The planning board extended this  
21       period, written comments beyond the minimum of  
22       10 days. All who wish to speak must sign up  
23       with your names, addresses, and any  
24       affiliations. We are going to give the project  
25       sponsor when we finish with this, five minutes

## HUDSON HIGHLANDS RESERVE

1 description of the process -- the project.  
2 This is not a question and answer period. You  
3 will direct all your questions to the planning  
4 board. All comments shall be directed to the  
5 planning board. Comments shall be limited to  
6 two minutes. Comments should be limited to the  
7 draft environmental impact statement. This  
8 meeting is being filmed, and comments will be  
9 recorded by a stenographer. If -- your turn to  
10 speak, please step to the microphone, and  
11 identify yourselves. And the microphone is up  
12 here, and the camera is there. So -- and we'll  
13 start with any comment -- what -- start first  
14 with brief comments from any of the board  
15 members, if they want.

16 MR. ZUCKERMAN: Thank you, Mr. Chair.

17 I'd like to make a couple of points, and  
18 these are directed at the members of the  
19 public. I'll try not to repeat things as I  
20 said before.

21 As a planning board member, I draw on five  
22 areas of input to ultimately vote. The  
23 applicant's word, the code, our experts, my own  
24 experience and judgment, and the input of the  
25 public. You had some input, but most of your

1 time has been confined to the first -- from  
2 those inputs in your first pass when we had you  
3 talk about a year and change ago, I arrived at  
4 and voted at a positive declaration of  
5 environmental impact with pretty explicit  
6 concerns supporting my vote that I expressed  
7 there and subsequently.

8 Last month, when we accepted this DIS  
9 [sic] which does not mean agreement, I stated  
10 again my same concerns about this project's  
11 environmental impact and was validated when the  
12 project reps had no changes that were offered  
13 in this submission that addressed my concerns.  
14 As I represent you, the members of this town,  
15 I'm here to listen to your voice again. We  
16 need your input. It is critical. This is our  
17 town. As board members, we are all from [sic]  
18 you. So, please, tell us what you think and  
19 how you feel. Please try to be objective.  
20 Definitely be respectful, but most importantly,  
21 let your perspective be heard by me and my  
22 colleagues.

23 On a slightly personal note, I have to  
24 leave at 9:45 tonight. So I -- I will quietly  
25 walk out as I head to Philadelphia tonight, but

## HUDSON HIGHLANDS RESERVE

1 I -- so I apologize in advance for anyone who  
2 sees me slink out. Thank you.

3 MR. MERANTE: You never slink out.

4 MR. ZUCKERMAN: I never slink out, though.

5 MR. MERANTE: Dennis.

6 MR. GAGNON: No comment.

7 MR. MERANTE: Neal.

8 MR. TOMANN: No. No comment.

9 MR. MERANTE: Kim.

10 MS. CONNER: I have some questions, but  
11 I'm going to wait and see if the public comes  
12 up with them first.

13 MR. MERANTE: Peter.

14 MR. LEWIS: I will do the same.

15 MR. MERANTE: Dave.

16 MR. HARDY: No.

17 MR. MERANTE: And I want to get into it.  
18 The next five minutes or less, the applicant  
19 will give a brief description of the project.

20 MR. O'ROURKE: Thank you, Mr. Chairman,  
21 members of the board.

22 My name is Richard O'Rourke. I'm an  
23 attorney with the law firm Keane & Beane, PC.  
24 And I represent the property owner, and -- and  
25 the person who is chief architect, Ulysses

1           Liceaga, who is here, and as a division of the  
2           subdivision.

3           We have a very limited time to explain the  
4           project. So I'm going to keep my remarks  
5           remarkably brief. Because the concept is --  
6           is, as you said, to hear from the public with  
7           respect to those comments and the questions  
8           that they have regarding the document that's in  
9           consideration of -- of tonight's meeting. The  
10          books that are considerable are here. They've  
11          been available to the public for some time.  
12          They shall remain available to the public at  
13          the library and other locations. You will see  
14          that a great deal of study has gone into and  
15          has been done with respect to this property,  
16          all of which is necessary when you are  
17          proposing a project that is setting aside so  
18          much open space and attempting to develop  
19          quality subdivision and equestrian center.

20          The proposal is for there to be a  
21          community of what could be termed "green  
22          homes," which means that the homes shall be  
23          built to the highest standards in terms of  
24          environmental sensitivity and to complement the  
25          natural landscape, all to be developed

1 alongside a carefully planned state-of-the-art  
2 equestrian facility. The homes are not limited  
3 only to owners who intend to board their horses  
4 at the equestrian facility, but are targeted  
5 for those who envision using this property for  
6 seasonal use and like-minded residents who  
7 intend to encourage and maintain ecological  
8 value of this property.

9 The remaining 159.8 acres are to be left  
10 untouched and preserved as open space by legal  
11 instruments that will keep it as undisturbed  
12 open space in perpetuity. According to the  
13 conservation analysis previously prepared, the  
14 land intended for the preservation is a high  
15 ecological and conservation value and will be  
16 protected and will maintain the natural  
17 integrity for native species that inhabit the  
18 land.

19 Because there is some misunderstanding and  
20 misconceptions as to what is proposed including  
21 the access points, the proposed development,  
22 the resulting impacts, our consultants will  
23 provide a very brief review of precisely what  
24 is proposed, what the project benefits are, and  
25 why we believe this project is not only good

1 for the community, but also for the  
2 environment.

3 We are creating opportunities for  
4 recreation and a quality development. And the  
5 analysis that has been undertaken provides a  
6 framework of protection and quality development  
7 that will ultimately benefit the community on a  
8 much larger scale.

9 We apologize in advance because the format  
10 of this public hearing and the regulations of  
11 SEQRA do not allow us to answer your questions  
12 this evening. By law, your questions will be  
13 answered in writing as part of the process. So  
14 we apologize again for not giving the answers  
15 tonight, but we will be responsive in  
16 accordance with the law which will require the  
17 questions posed this evening to be answered in  
18 writing in what is called the "final  
19 environmental impact statement."

20 Thank you very much. And Steve Gross, our  
21 consulting planner, will quickly take us  
22 through.

23 MR. GROSS: I'm Steve Gross, principal  
24 Hudson Highlands Environmental Consulting.

25 I'm going to face you rather than the



1 board. The board is already familiar with this  
2 project. I'm going to try to give you a quick  
3 orientation for the rest of you who may not be  
4 as familiar as -- as some who have been  
5 analyzing this project from the start.

6 MR. MERANTE: Steve.

7 MR. GROSS: Yes?

8 MR. MERANTE: One minute. That --

9 MR. ZUCKERMAN: You used 3:40 already.

10 MR. GROSS: I'm going to beg for more  
11 time. I can't orientate -- orientate these  
12 good people for this project that quickly.

13 But this is a conversation subdivision.  
14 Briefly, what that means is that we've -- it's  
15 a design that takes into account the  
16 environmental constraints and the environmental  
17 benefits of the -- or the features of the  
18 property to come up with the design. What we  
19 started with was a conservation analysis that  
20 looked at all of the natural resources that  
21 were on the property and the constraints, and  
22 mapped them out. And we came up with a map  
23 here that you see color coded.

24 Those areas that are the darkest are what  
25 termed to be "high conservation value." The

1 yellow is medium conservation value, and the  
2 blue is the lowest conservation value or  
3 potential development area. And this was  
4 decided on a few factors. Like, for instance,  
5 this is where there is a stream and wetlands  
6 system that comes through the property, flows  
7 into Ulmar Pond, flows out of Ulmar Pond  
8 through state wetland. And then further it  
9 wraps around closer to the Clove Creek. Clove  
10 Creek comes around this way, and this is where  
11 we have Clove Creek on the -- on the property  
12 itself.

13 MR. MERANTE: Steve.

14 MR. GROSS: This is also the area where we  
15 found the highest natural native vegetation  
16 where there has been no development in the  
17 past. There was a historic road that went  
18 through the property this way (indicating) and  
19 there was -- there was some existing structures  
20 that were on the property down here and also up  
21 here (indicating.) And this is an area that  
22 had been, over the centuries, subject to some  
23 previous occupation and development.

24 The flattest areas of the site are also in  
25 this blue area (indicating.) We have steep

1 slopes here, here, here (indicating); and so we  
2 were trying to avoid that. So the development  
3 was planned to avoid the constraints of what --  
4 steep slopes, preserve the most highly  
5 beneficial parts -- the parts of the property,  
6 especially the wetlands, the wetland buffers,  
7 the pond, and the native areas and native  
8 vegetation and high-value wildlife habitat.

9 We have a lot of invasive species in the  
10 area that had been previously subject to  
11 development. And so the area was clustered  
12 into these areas.

13 MR. MERANTE: Steve, you got to wrap it  
14 up.

15 MR. GROSS: Huh?

16 MR. MERANTE: You got to wrap it up.

17 MR. GROSS: I'm trying to help -- help the  
18 public.

19 MR. MERANTE: We gave you an extra minute.  
20 I know the DI -- DEIS is now available, and  
21 will continue to be available. We want to get  
22 to speakers here.

23 MR. GROSS: Okay.

24 MR. MERANTE: We can't manufacture time.  
25 We'll start with the sign-in sheet going



1 first. We have the sheets in the order in  
2 which they were completed. So number one is  
3 Linda Ann Ewen.

4 MS. ANN EWEN: I'm only first, because I  
5 got here early.

6 I don't really represent anyone but  
7 myself. But I am vice chair of the Philipstown  
8 Aging at Home organization. And I'm a member  
9 of Glasbury Court, which is a neighbor of this  
10 development. And I just wanted to clarify  
11 because through -- all of this has been very  
12 confusing.

13 The first thing I want to say is Michelle  
14 Smith wrote an absolutely wonderful article in  
15 the paper. And I want to thank her. And those  
16 of you who did not read that article should  
17 look at that for sure.

18 The second is the point that they are  
19 applying for a conservation subdivision. And  
20 that means they must have a conservatory. An  
21 organization that says you have played by the  
22 rules, and we will make sure you continue to  
23 keep playing.

24 My question one, to the board, is: It is  
25 my understanding that the Highland Hudson --

1 Hudson Highlands Trust -- Land Trust did not  
2 accept the proposal as it was given to you,  
3 which means they have serious questions about  
4 whether this is, indeed, a conservation  
5 subdivision.

6 My second question is: Forty horses is a  
7 lot of horses. Now, according to the zoning  
8 regulations of the town of Philipstown, each  
9 horse requires an acre. If you own a horse,  
10 you have to have it parked on an acre. And I'm  
11 -- it's not 40 acres and a mule. I want to  
12 know if there's 40 acres set aside for the 40  
13 horses who will poop and pee. And that's a lot  
14 of consideration those of us who are going to  
15 live nearby.

16 So those are my two main concerns. Thank  
17 you very much for your time.

18 MR. GABA: It's going to take longer if  
19 they applaud after --

20 MR. MERANTE: Yeah. If you could hold up  
21 the applause. The speakers finish -- so we can  
22 have the next one.

23 Nat Prentice is next. And standing by,  
24 afterwards, will be Susan Anspach.

25 MR. PRENTICE: Good evening, everybody.

Response  
3C.4

1 My purpose in coming is just to remind you  
2 about the relevance of the comprehensive plan  
3 to this particular proceeding.

4 My name is Nat Prentice. I live in  
5 Garrison. I am currently serving as the  
6 coordinator of the town's comprehensive plan  
7 update committee. I was also a member of the  
8 special board that, back in the years 2001 and  
9 2006, wrote the existing comprehensive plan.  
10 So I'm familiar with it. And, in fact, I never  
11 leave home without it.

12 Just -- this a quick reminder, you know,  
13 what it is. It's a statement of community  
14 goals and sets out a conceptual road map as to  
15 how to achieve them. It's not the law. But,  
16 in fact, it does provide a backbone to the law  
17 in very concise and unambiguous language. When  
18 the law, in this case, the open space  
19 development zoning law that comes subject to a  
20 variety of interpretations as it has in this  
21 application, I believe that there's an  
22 opportunity to go back to the comprehensive  
23 plan, and see what it says about open space  
24 development, particularly, when this law is  
25 being interpreted for the very first time in

1 the history of the town.

2 So amongst the things that the  
3 comprehensive plan says about open space  
4 development, I'm going to read from Chapter 3,  
5 Section R, capital letter R, 2.4. "Allow open  
6 space, paren, cluster development with  
7 safeguards to ensure that such developments do  
8 not lead to more development than would  
9 otherwise occur. And that they preserve --  
10 preserve open space that the town wishes to  
11 protect." Just going to repeat one of the  
12 clauses, "With safeguards to ensure that such  
13 developments do not lead to more development  
14 than would otherwise occur." Now, I don't  
15 understand as much about this application as  
16 you do, but my interpretation is that because  
17 we are in the open space overlay, then the  
18 applicant was doing -- they were doing a  
19 conventional application would have the  
20 opportunity to build 10 houses. This plan  
21 calls for 25 houses and calls for a commercial  
22 equestrian center capable of housing 40 houses  
23 -- horses.

24 MR. MERANTE: Nat. Please.

25 MR. PRENTICE: Okay.

Response  
3C.5

Response  
2.29

Response  
2.24

1 MR. MERANTE: Time.

2 MR. PRENTICE: Okay. Good.

3 AUDIENCE MEMBER: Okay. But I really want  
4 to clap for that one.

5 MR. MERANTE: Ladies and gentlemen,  
6 please.

7 Glenn Lowry will be up next.

8 MS. ANSPACH: My name is Susan Anspach. I  
9 live at 516 East Mountain Road South.

10 Members of the planning board, having  
11 attended most of the public hearings held on  
12 this proposal, I've seen a number of  
13 recommendations that would permit development  
14 but on a scale that's consistent with the  
15 limits of the site.

16 However, this developer seems to think  
17 that by utilizing a conservation subdivision  
18 designation, which sets aside 159.8 of its 210  
19 acres as undisturbed open space, he can develop  
20 however he wants, even if it's inconsistent  
21 with the character of the community, or the  
22 intent of the regulations enabling such  
23 subdivisions. Accordingly, none of the  
24 suggestions from the public were accepted in  
25 the draft EIS and, thus, no changes were made



1 to the initial proposal.

2 As you've heard previously or read in  
3 written submissions, there are many concerns  
4 that should stand in the way of this project  
5 going forward as is. However, at this late  
6 date, what is even more revealing about the  
7 intentions of this developer, is his duplicity  
8 in addressing the required traffic study for  
9 this project. When neighbors objected to  
10 access being on the winding and narrow roads  
11 and Horton Street and East Mountain Road North,  
12 the developer was quick to claim that those  
13 roads would only be in cases of emergency, and  
14 access to the project would be directly from  
15 Route 9.

16 Apparently, since 2014, the New York State  
17 DOT has been asking for details regarding this  
18 proposed Route 9 access. After the 2018  
19 scoping sessions, the DOT raised a number of  
20 issues. To date, those DOT concerns have not  
21 been addressed. And to quote from their June  
22 7th, 2019, letter to the planning board and I  
23 quote, "Therefore under 6NYCRR, part 7 -- part  
24 617 of SEQRA as an involved agency, we are  
25 unable to endorse the DEIS for this project."

Response  
2.90

1 In conclusion, since this is Philipstown's  
2 first conservation subdivision, we need to get  
3 it right. Thank you.

4 MR. MERANTE: You are a hard bunch.

5 MR. LOWRY: Good evening. I'm Glen Lowry.

6 MR. MERANTE: Next will be Irvine Flinn,  
7 who is up next.

8 Mr. Lowry.

9 MR. LOWRY: And appreciate the opportunity  
10 to address you.

11 My wife and I live at 130 Horton Road,  
12 which puts us as direct neighbors to this  
13 development. We are not against development at  
14 all. We actually believe an intelligent and  
15 sound land management program that includes  
16 housing and, potentially, a stable -- is  
17 viable. What we are deeply concerned about is  
18 the scale of the equestrian center. And just  
19 draw your attention to the idea of a 40-horse  
20 barn with all the intended outbuildings,  
21 parking, circulation, waste removal, in the  
22 middle of what is already a beautiful  
23 environment that's about to be further  
24 protected with an easement. It would be like  
25 putting a factory or a gravel pit on Main

Response  
2.70

1 Street. The scale makes no sense. And we are  
2 deeply concerned that this will have a negative  
3 impact not just on our immediate environment on  
4 Clove Creek, on the nature and natural habitats  
5 that are there. And we just call your  
6 attention to the scale of this proposed  
7 equestrian center and would urge you to go and  
8 walk that land and imagine what all of that  
9 waste removal is going to look like, and how  
10 it's going to function in the scale of this  
11 barn and the horses involved.

12 I don't have the sense of humor of our  
13 first speaker, but I can assure you that we are  
14 as concerned as she is by the impact that that  
15 is going to have. Thank you.

16 MR. MERANTE: All right. Joycelin  
17 Apicello. Irvine Flinn. Sorry. Irvine Flinn.  
18 Joycelin Apicello is next.

19 MR. FLINN: Thank you.

20 I'm Irvine Flinn, a resident of Garrison.  
21 And I'm here tonight, particularly, because  
22 yesterday our state legislature enacted the  
23 Climate Leadership and Community Protection  
24 Act, which the governor has now signed into  
25 law.

Response  
2.21

1           As you know, there's a scientific  
2           consensus that continued emissions of carbon  
3           dioxide, methane, and other greenhouse gases  
4           caused by human intervention in the natural  
5           order will result in catastrophic climate  
6           change. The new law sets our state's goal at  
7           net zero percent emissions by the year 2050.  
8           We are here this evening, of course, to  
9           consider the environmental impacts of a  
10          proposed -- proposal to build 25 houses on what  
11          is essentially undeveloped forest land abutting  
12          the pond and fishing stream. This project is  
13          not designed -- provide needed affordable  
14          housing for the full-time residents of our  
15          community, nor is it designed to attract,  
16          apparently, well-to-do New -- New York City  
17          families seeking second homes, many of whom  
18          will likely drive back and forth on the 50-plus  
19          miles each way in cars emitting exhaust and  
20          gasoline engines. And when they're here, they  
21          won't be walking across the street to Food Town  
22          for their groceries. There will be 25  
23          additional gas-emitting cars driving to town,  
24          seeking space in the Food Town parking lot.  
25          How will their new second homes be heated?

1 Their city homes, by the way, will likely  
2 remain heated while they are up here. With  
3 oil, propane, maybe, electric heat pumps, I  
4 hope. And if it is heat pumps, where will they  
5 get their cleanly generated electricity?  
6 There's nothing in the site plan indicating a  
7 solar array --

8 MR. MERANTE: Irvine. Thank you. Two  
9 minutes is up.

10 MR. FLINN: Okay. Thank you.

11 MR. MERANTE: Jocelyn Apicello. D.J.  
12 Baker is next.

13 MS. APICELLO: Good evening. Thank you.

14 I know this has been a long process which  
15 we're making. I'm standing up here after such  
16 a long time, but I really felt compelled to  
17 come to have my voice heard. My name is  
18 Jocelyn Apicello. I live in Garrison. I run a  
19 farm. I have a small nonprofit called  
20 Ecological Citizens Project. And I'm a  
21 volunteer on climate smart community task  
22 force.

23 The precedent that could be set here by  
24 allowing a, quote, conservation subdivision has  
25 really compelled me to make my voice heard

Response  
2.17,  
3B.65

1 tonight as a professor of public health who  
2 considers housing and land use decisions as  
3 paramount to the public's health and,  
4 particularly, to the health inequities we find  
5 in our society today. But also as a resident  
6 of Philipstown who is proud of this place and  
7 really encourages you and all of us to continue  
8 to be a positive model for a healthy,  
9 ecologically conscious lifestyle up here in New  
10 York State.

11 The truth is: This region of the state is  
12 poised to take in an increasing population as a  
13 result of predicted climate change displacement  
14 patterns. I encourage us to brace ourselves  
15 for this by continuing to conserve land and  
16 develop smartly; that is, to protect important  
17 forest and wetland areas that are known carbon  
18 sinks and would do more to pull carbon out of  
19 our atmosphere than we had ever realized, and  
20 to discourage the development of single-family  
21 attached homes on larger plots that cut nature  
22 from other humans and wildlife, especially in  
23 open spaces that are deemed conservation  
24 subdivisions.

25 A recent New York Times article just

1 published -- reported that in most cities  
2 across this country, it's illegal to build  
3 anything other than single-family detached  
4 housing in roughly 75 percent of all lands.  
5 This trend in detached, large-scale,  
6 single-family detached housing developments are  
7 results of local zoning laws. The economic and  
8 racial segregation that exists in towns and  
9 cities across this country is not only the  
10 result of federal and private bank lending  
11 policies, but it's a result of local zoning and  
12 planning decisions.

13 So I urge us and you to use your power as  
14 a local planning and zoning board to really  
15 make this conservation subdivision be what it's  
16 worth. The housing affordability --

17 MR. MERANTE: Thank you.

18 D.J. Baker. Heidi Wendel is next.

19 MR. BAKER: Thank you. My name is  
20 (indiscernible) Baker. My wife, Suzanne and I  
21 are long-time residents of Garrison. We  
22 support the right of private property owners to  
23 develop their property, but only in accordance  
24 with applicable rules and regulations.

25 We think that the filing by the Hudson

Response  
2.17,  
3B.65

1 Highlands Land Trust is a sort of commentary on  
2 issues that have been raised by Hudson  
3 Highlands Reserve. We commend the points  
4 raised by the land trust to you as the planning  
5 board. These are not easy issues. These are  
6 not simple questions. You have to balance the  
7 rights of the property owner against the  
8 welfare of the community, the protection of  
9 water, the protection of wildlife habitat, the  
10 protection of vegetation. We believe it can be  
11 done. I think it's clear. The land trust  
12 believes that it can be done, but it will take  
13 a lot of thought and effort and, frankly,  
14 compromise by the proposed developer. It's  
15 going to be critically important as to who  
16 holds the conservation easement. It's going to  
17 be critically important how the community  
18 monitors compliance. And it's going to be  
19 critically important what the enforcement  
20 remedies are.

21 We got a lot of confidence in you as the  
22 planning board. We think you can get it right.  
23 We think this developer has the talent, the  
24 ability, and the resources to work with you to  
25 get it right. And for the sake of the

Response  
2.49



1 residents of Philipstown, we urge you to do so  
2 and appreciate your time and effort. Thank  
3 you.

4 MR. MERANTE: Thank you.

5 Heidi Wendel. And Celia Imrey is next.

6 MS. WENDEL: Hi. My name Heidi Wendel.

7 And I'm a newcomer to the area, which I know  
8 makes me a questionable occupant of a housing  
9 hearing.

10 But I wanted to express a -- a view of a  
11 newcomer. I moved here for the hiking and the  
12 beauty of this area which is so famous,  
13 historically. And, frankly, I moved from 114th  
14 Street in New York City, and I think this area  
15 is well-known for its unbelievable beauty, for  
16 the hiking opportunities. Look at all the  
17 young people getting off the train every  
18 weekend in Cold Spring and Garrison for the  
19 hiking. And I would like to say that this --  
20 to call this spot, this subdivision a  
21 conservation subdivision is extremely unfair to  
22 that new generation of hikers and nature  
23 lovers. And it sends the wrong message to  
24 people like my 28-year old daughter and her  
25 boyfriend who love this area for its beauty and

Response  
3D.2

1 its historic properties.

2 And, I think, in addition to being  
3 extremely important for -- to have the first  
4 conservation subdivision truly be a  
5 conservation subdivision, with the qualities  
6 that Michelle Smith discussed in her  
7 prospective in the PCNR. It's also important  
8 to remember that, ultimately, it will greatly  
9 reduce housing price and the value of  
10 properties in this area to have this type of  
11 subdivision and to turn this area into a  
12 suburban community when it has such unique  
13 properties that are so important to the housing  
14 values and property values here. And to its --  
15 its fame and its -- its -- its prominence,  
16 historically. And I beg that consideration to  
17 be made in this process. Thank you.

18 MR. MERANTE: Thank you.

19 And next will be Krystal Ford. Is that  
20 right?

21 THE WITNESS: Hello, everyone. Thank you  
22 for the opportunity to speak.

23 I'm Celia Imrey. I live at 62 Horton  
24 Road. I've been there for 18 years. I would  
25 like to ask my question first since I might run

1 out of time, and I'll describe the reasons  
2 later. I would like to understand whether or  
3 not it's possible to have a proper set of  
4 accountability and responsibility for any type  
5 of environmental project going forward in  
6 Philipstown. And the reason I'm asking is that  
7 Glasbury Court was put into my neighborhood in  
8 2009 with a lot of opposition from our area.  
9 Neighbors collected together to oppose it, and  
10 it's been put in as a conservation. However,  
11 when I first got to my home in 2001, I couldn't  
12 even step into Clove Creek without being  
13 nibbled by trout. There were turtles  
14 everywhere. There were bats in the sky at  
15 night. There were so many night noises that we  
16 would be woken up. And I have to say it's sad  
17 to report that the natural habitat in my home,  
18 62 Horton Road, right across the street from  
19 this development, is so depleted in the last 18  
20 years.

21 I've been calling the Department of  
22 Environmental Conservation to ask for somebody  
23 to come and make a report. I've gotten a  
24 permit to stock my stream with trout, because  
25 I'm so disturbed at how few there are. I would

Response  
3B.48

1 like to ask the planning commission to please  
2 do a follow-up report for Glasbury Court on the  
3 environmental impact that's been done in our  
4 area already. I'm downstream. I'm really  
5 worried about this -- this project for the same  
6 reasons that we can't really necessarily  
7 measure. Glasbury Court was supposed to be  
8 fine. Turns out, it might not be fine. So I'd  
9 like to ask the planning board to, please,  
10 consider a rigorous accountability for any  
11 agreed proposal for the properties. Thank you.

12 MR. MERANTE: I have one, two, three, six  
13 crossed-out names. I have -- the next person  
14 would be Madeleine McGinkey.

15 MS. FORD: I'm Krystal Ford. I live on  
16 Garrison Woods Road.

Response  
3A.27

17 So I'm concerned with about a couple of  
18 things. One of the things I think about is,  
19 obviously, water quality. I would like to know  
20 how up-to-date the flood zone maps are. As we  
21 have a warming world, we are going to be  
22 wetter. We have had the wettest spring I can  
23 remember. And as we get more rain, I'm  
24 thinking about the horse manure flowing; all  
25 the septic systems overflowing. We have septic

Response  
3A.20

## HUDSON HIGHLANDS RESERVE

1 systems overflowing into the Hudson. How do we  
2 make sure we don't have it overflowing into  
3 Clove Creek?

4 I think about how is pesticide, fertilizer  
5 use going to be strictly monitored. And I also  
6 think about how the horses will impact the  
7 wildlife. Are they going to be scared off? So  
8 those are just my concerns.

9 MR. MERANTE: Thank you.

10 Let me just ask Barbara or Glen Ruckstahl.  
11 Are you here? Because your names are crossed  
12 off.

13 Okay. So this would be Madeleine  
14 McGinkey.

15 MS. MCGINKEY: I've been living on East  
16 Mountain Road North for 16 years.

17 I would like to focus on the traffic  
18 safety issues associated with access to the  
19 site. First, I would like clarification on  
20 exactly where the main access point will be,  
21 and if it has gotten approval from the DOT.  
22 Second, I would like to know if a traffic study  
23 has been submitted to the DOT. I know I speak  
24 for many of my neighbors for whom safety is a  
25 priority when I ask about a traffic study. But

Response  
3B.49

Response  
2.90

1 I don't just speak for my current neighbors. I  
2 also speak for the safety of any potential  
3 future neighbors who might live at the proposed  
4 Hudson Highlands Reserve. I also speak as a  
5 victim of a very serious car accident at the  
6 intersection of Route 9 and East Mountain Road  
7 North, which is currently shown as a proposed  
8 access point to the site. Last summer, I was  
9 waiting on the southbound side of Route 9 to  
10 make a left turn to go home onto East Mountain  
11 Road North. My car was rear-ended and totaled  
12 by an 18-wheeler tractor trailer going over 50  
13 miles an hour, and I was spun into the oncoming  
14 traffic. I suffered trauma and serious  
15 injuries, and the police said that I am lucky  
16 to be alive. The police also mentioned that  
17 accidents happen at that spot all the time.  
18 But the point is not my accident; it's  
19 everyone's safety who travels up and down Route  
20 9.

21 I would hope that our planning board  
22 demands submittal of a thorough traffic study  
23 for review by the DOT. I would hope that the  
24 applicant can provide mitigation due to the  
25 additional traffic that the proposed project

1 will generate. Solutions such as a turning  
2 lane, flashing lights, or reduction of speed  
3 limit along that section in Route 9 need to be  
4 looked at. I would ask the board to address  
5 two letters it received from the DOT. In the  
6 first letter dated June 20th, 2018, the DOT  
7 deemed the direct access off of Route 9 to  
8 development as, quote, not necessary because  
9 there are access points on East Mountain Road  
10 North and Horton Road. So which is it? It's  
11 already hard to get in and out of those two  
12 roads. Further traffic and horse trailers  
13 would worsen the bottle neck and increase  
14 hazards on a road that is already part of the  
15 school bus route.

16 MR. MERANTE: Ms. -- Michelle Smith.

17 And after Ms. Smith will be Robert  
18 Weisholz.

19 MS. SMITH: Hi. I'm Michelle Smith from  
20 Hudson Highlands Land Trust. Thank you for the  
21 opportunity to comment.

22 Two days ago, we submitted a 25-page  
23 report with our comments on the DEIS. In two  
24 minutes, I don't have time to go through all of  
25 that. I'll summarize our three main concerns:

Response  
2.85

1 They have to do with wildlife, with the  
2 definition of open space that's conserved, and  
3 with the homeowners' association, and the  
4 equestrian facility management on environmental  
5 impacts. On the wildlife, we hired our own  
6 experts. We believe that there are  
7 shortcomings in the wildlife studies that need  
8 to be remedied.

9 We also believe that there's not  
10 sufficient mitigation of impacts on New York  
11 species of special concern, that those are  
12 species that have been declining in population  
13 across the state.

14 Then on the definition of open space and  
15 consistency with the zoning code, you will see  
16 that the conserved open spaces actually split  
17 into two different segments that are  
18 disconnected. So they are not continuous.  
19 They cut off wildlife corridor. They constrict  
20 another corridor. And also the conserved open  
21 space includes the 11-acre equestrian facility  
22 which is fully developed and, therefore,  
23 doesn't really have any residual conservation  
24 value. And, therefore, we don't think it  
25 should be included in the conserved open space.

Response  
3B.34

Response  
2.65



1           And then, finally, I think we can't  
2           underestimate the impact that the homeowners'  
3           association and equestrian facility management  
4           have on the future environmental impacts. The  
5           governance of those organizations will drive  
6           what happens with water in Clove Creek, Clove  
7           Creek aquifer. And if anything goes wrong, if  
8           they get into financial difficulty or have  
9           problems in their governance that will have an  
10          adverse impact on the environmental index of  
11          this project. And there needs to be  
12          (inaudible, speaking over alarm) for that.

13                 Finally, I'll just finish and say that  
14          we're very concerned about the loss of  
15          biodiversity locally and globally and the  
16          planning board is -- I know this is a difficult  
17          task.

18                 We want this project to work. You are on  
19          the front lines of ensuring the future of  
20          biodiversity in Philipstown. And we hope you  
21          take this very seriously. Thank you.

22                 MR. MERANTE: Robert Wersholz.

23                 MR. WERSHOLZ: I'm not going to speak.

24                 MR. MERANTE: Okay. Scott Silver. And  
25          next will be Hank Osborn.

Response  
2.43

1           MR. SILVER: Thank you very much. As I  
2 said my name is Scott Silver. I'm a new  
3 director of the -- the Constitution Marsh  
4 Audubon Sanctuary and visitor center. I thank  
5 you very much for the opportunity to speak.

6           Couple things I like -- I have a couple of  
7 questions and then a comment. My one question  
8 is: What are the safeguards that are in place  
9 for eliminating or -- or minimizing equestrian  
10 trail riding within the center. Once  
11 everything is built and you have 40 horses on  
12 the land, generating, approximately, one ton of  
13 manure and urine a day. The impact on -- on  
14 the surrounding areas will also be very great.

15           The other thing I wanted to say is I  
16 wanted to commend the board for the -- the open  
17 space zoning law. And I would ask that you  
18 respect the spirit of the law as well as the  
19 letter of the law when making your -- while  
20 making your decisions which, I understand, is  
21 difficult.

22           We are very concerned about the loss of  
23 biodiversity as well. And I understand that  
24 the big problem is that it's always a one-way  
25 street. We make these mistakes. We don't have

Response  
3A.9

## HUDSON HIGHLANDS RESERVE

1 a chance to go back and do anything else about  
2 it.

3 So I would request and I would expect that  
4 you be diligent in your decision-making. Thank  
5 you very much.

6 MR. MERANTE: And follow up will be Lynn  
7 Rogoff.

8 MR. OSBORN: My name is Hank Osborn. I  
9 work for the New York New Jersey Trail  
10 Conference. We work to protect trails from  
11 erosion and trails -- protect them from overuse  
12 and improper use, and protect them from various  
13 other threats.

14 Have you ever been to the top of a  
15 mountain and seen a beautiful view, a beautiful  
16 view that features a single blemish in the  
17 middle of nature? The Hudson Highlands Reserve  
18 project site is directly east of one of the  
19 most popular parts of the state. The Hudson  
20 Highlands State Park -- Park includes the  
21 number one most popular day hike in North  
22 America, Break Neck Ridge. From the top of the  
23 ridge there is an amazing view to the east over  
24 rolling hills, over all of Fahnestock Park.  
25 There's nothing but green hills as far as you

1 can see. There is some development along the  
2 Route 9 corridor, but it is all concentrated  
3 right along the road. All the hillsides above  
4 are completely undisturbed. The view is  
5 spectacular. You cannot tell where Fahnestock  
6 Park begins or ends. The proposed development  
7 would be seen from that viewpoint and every  
8 other viewpoint along the Fishkill Ridge and  
9 Scofield Ridge. There are a total of 11  
10 viewpoints. All of them look directly east  
11 across the green hills. The proposed  
12 development would be the only blemish or scar  
13 in every one of those 11 viewpoints. The  
14 houses will be clearly visible from the trails.  
15 The equestrian facility will take up far less  
16 of the view than the houses, but at 160,000  
17 square feet, it is the same size as a Walmart  
18 Super Store which is 170,000 square feet.

19 The proposed development will damage the  
20 views and damage the trail experience. We, at  
21 the trail conference, created a view shed  
22 analysis, and the data clearly shows that the  
23 development will not be hidden at all. And my  
24 -- my question is that I -- I ask that a  
25 genuine view shed analysis be ordered. Thank

Response  
3D.5

1           you.

2           MR. MERANTE: Judy Farrell will be next.

3           MS. ROGOFF: Oh, I'm Lynn Rogoff.

4           MR. MERANTE: You're up. You're up.

5           You're up.

6           MS. ROGOFF: Hi. I'm Lynn Rogoff. My  
7           house is right there (indicating). I've been  
8           here for 30 years. And I was invited to come  
9           by certified letter.

10           And what I want to talk about tonight is  
11           that I cannot believe that last winter, we gave  
12           a detailed, extensive, dedicated feedback to  
13           the Hudson Highlands Reserves. And it appears  
14           that rather than choosing to expand -- to  
15           rather -- they chose rather to expand the plan  
16           and gave short attention to our major concerns.  
17           And that it appears that they would -- that it  
18           was not important to them, and they chose  
19           rather to not to decrease the equestrian center  
20           or the number of houses.

21           Now, they have indoor swimming pools on  
22           their Website as something that will go in the  
23           houses. And they continue to claim on their  
24           Website Hudson Highlands Reserve that people  
25           will not use the community schools, roads, and

1 resources but will spend millions to visit once  
2 in a while.

3 Their plan is for -- still for 40 horses.  
4 And, now, there are plans for commercial events  
5 and classes and manure machinery on their  
6 Website. I reviewed their Website, and it  
7 states, quote, the essential attraction as to  
8 the development is the equestrian facility. We  
9 have determined the equestrian center,  
10 clubhouse, have padlocks [sic] -- padlocks to  
11 compose the amenities package for the  
12 development including a separate building,  
13 housing a second indoor arena and spectator  
14 area.

15 It now appears that they represent that  
16 this development will not use community roads,  
17 schools, and other resources such as our water,  
18 our light, our wildlife, our air. It does not  
19 make sense that people will pay millions of  
20 dollars not to use our community resources.  
21 Their representations appears to be green wash.  
22 If you don't know what green washing is,  
23 it's --

24 MR. MERANTE: Thank you.

25 MS. ROGOFF: Okay. You can look it up.

Response  
3D.1

## HUDSON HIGHLANDS RESERVE

1 Thank you.

2 MR. MERANTE: Judy Farrell.

3 SPEAKER: She's going to be back in two  
4 minutes.

5 MR. MERANTE: Ray Warner. Ray Warner.

6 MR. WARNER: I'm Ray Warner. I live in  
7 Cold Spring, and I thank you for the  
8 opportunity to speak.

9 My family opposes this project. The study  
10 does not adequately address the effects of 25  
11 houses on the wildlife corridors in the area.  
12 But we're most concerned with the 40-horse  
13 equestrian center. We think this pushes it way  
14 over top. And even if the houses were not too  
15 much, this would clearly be too much. We  
16 question whether it adequately addresses the  
17 effects the horses will have on the wildlife.  
18 We question whether the horses will be limited  
19 to the equestrian center or will be roaming  
20 through the other areas of the property, and  
21 what effect that will have and whether there's  
22 anything in the plan that will prohibit that  
23 from happening later.

24 And we also think that the plan does not  
25 adequately address the effect of the center on

Response  
3B.34

Response  
3C.4

Response  
3B.49

1 neighboring wetlands. Thank you.

2 MR. MERANTE: Judy Farrell.

3 MS. FARRELL: Yes.

4 MR. MERANTE: And next is Carli  
5 Fraccarolli.

6 MS. FARRELL: I'm Judy Fraccarolli for the  
7 town -- town board.

8 And I got my binder and read it from cover  
9 to cover. And it struck me on page 27 under A2  
10 public meeting for the project and benefits,  
11 that the applicants did not discuss the public  
12 needs of Philipstown residents, but the needs  
13 of New York City residents, which was puzzling.

14 And then on page 28, there's a lot of data  
15 from the American Horse Council on the economic  
16 impact of the equine industry. I love horses,  
17 but putting 40 horses alongside 25 new homes,  
18 raises many questions that must be answered,  
19 and not just about the economic benefits. And  
20 again on page 31, there's an analysis on the  
21 best places in the U.S. to buy an investment  
22 property. And, again, it says that the  
23 weekenders will likely to purchase these  
24 properties, and they're good long-term  
25 investment.

Response  
2.6



## HUDSON HIGHLANDS RESERVE

1 I just wanted to state that it also said,  
2 "A stabled horse produces 50 to 70 pounds of  
3 manure daily." So with 40 horses, that comes  
4 out to 2800 pounds of poop a day in our region.  
5 Again, it's a little vague on how they will  
6 handle the impact.

7 I would urge that we consider the input,  
8 and speak to survey, have focus groups with the  
9 residents of East Mountain Road South, East  
10 Mountain Road North, Horton Road, and what they  
11 might see as an adequate public and community  
12 benefit. Thank you.

13 MR. MERANTE: Thank you.

14 Carli. And Mark Tabashnick is next.

15 MS. FRACCAROLLI: Hi there. My name is  
16 Carli Fraccarolli. I'm an advocacy associate  
17 at Scenic Hudson. I'm delivering this  
18 testimony on behalf of Jeffrey Anzevino, who is  
19 the director at Scenic Hudson.

20 As the first project seeking planning  
21 board approval as a conservation subdivision,  
22 your review of this proposal will be precedent  
23 setting. Excuse me. As proposed, the  
24 alternatives -- the applicants preferred  
25 Alternative E is inconsistent with provisions

Response  
2.78

Response  
4.11

1 in Philipstown's conservation subdivision  
 2 Zoning code.

Response  
 2.33

3 Further, it would result in significant  
 4 environmental impacts. Scenic Hudson believes  
 5 that the project should be redesigned to be  
 6 more consistent with the home setting of the  
 7 applicant's Alternative D. This relocates five  
 8 residences from the western side of Ulmar Pond  
 9 and clusters them on smaller lots.

Response  
 2.65

10 In addition, we believe that the  
 11 equestrian facility should be reduced in size  
 12 and laid out in a more compact arrangement,  
 13 leaving a wider habitat corridor to the south.

Response  
 2.17

14 As proposed, Hudson Highlands Reserve does not  
 15 adequately meet town code requirements for, nor  
 16 the generally accepted definition of  
 17 conservation subdivision. The large house lots  
 18 sprawl across the entire western half of the  
 19 properties dividing remaining areas into three  
 20 separate sections resulting in forest  
 21 fragmentation and would not protect the  
 22 important habitat values found on site. Scenic  
 23 Hudson also disagrees with the applicant's  
 24 assertion that removing the five homes from  
 25 around the pond's west side and reducing

Response  
4.12

1           impervious conserved area is inconsequential.  
2           Any reduction of impervious conserved area is  
3           -- is relevant and consequential. And it would  
4           result in a smaller amount of lower quality  
5           edge habitat that would drive away species that  
6           rely on these large areas of continuous forest.  
7           Any losses of habitat on this site are losses  
8           of some of the largest and most intact areas of  
9           forest habitat in the Hudson Valley. This area  
10          is in -- within the Hudson Highlands  
11          significant biodiversity area as well as the  
12          Hudson Highlands forest spot designation. A  
13          more concerted effort should be made to cluster  
14          this development. Thank you.

15                 MR. MERANTE: Thank you.

16                 I would just like to advise anyone who has  
17          prepared statements to submit them to the  
18          planning board secretary which will be included  
19          in the responses. So if you had a prepared  
20          statement, even if it's on the back of an  
21          envelope, give it to us.

22                 MR. TABASHNICK: My name is Mark  
23          Tabashnick. I have a property that my family  
24          owns on East Mountain Road South.

25                 So I wanted to talk with the attorney and

1 speak with him.

2 MR. MERANTE: No, sir. Just direct it to  
3 the board.

4 MR. TABASHNICK: Okay. Pardon me.

5 MR. MERANTE: And don't go back and forth.

6 MR. TABASHNICK: The attorney says that a  
7 great deal of study has been done. I disagree  
8 with that. I think that if you look into some  
9 of their proposals pertaining, especially, with  
10 the equestrian center, you will see that in  
11 detail they want to set up a riding stable, a  
12 riding school, and a riding camp.

13 They also want to focus their studies on  
14 this area of horsemanship called "dressage."  
15 For those who don't know this, it's a very  
16 disciplined, it's a very expensive type of --  
17 of horse training. And it's not very well  
18 taken by most of the horse community in the  
19 U.S. Most of the horse community, as we know,  
20 are just about riding professionally. They may  
21 be training race horses or things like that.

22 So to -- to imply that there is a great  
23 deal of study into this means, to me, that they  
24 didn't look at the -- the actual specifics of  
25 what they are proposing in their equestrian

Response  
2.71

## HUDSON HIGHLANDS RESERVE

1 community. And in -- and, in fact, what would  
2 be more likely if I would suggest to delve into  
3 is that a zoning change to make this a more  
4 commercial activity rather than a residential  
5 activity would probably be more appropriate.  
6 If they wanted to go ahead and develop a  
7 commercial equestrian center, that probably  
8 would -- would be something that would be  
9 separate from a residential.

10 So trying to bring these two together does  
11 -- does not fall under the scope of what the  
12 community probably wants of a residential  
13 facility. And if we change the scale, I think  
14 that it would probably improve the -- the  
15 acceptance.

16 Remember, we all try to live together.  
17 And if this is going to be a -- a facility for  
18 everyone --

19 MR. MERANTE: Thank you sir, thank you.

20 MR. TABASHNICK: -- I think it has to be  
21 addressed that way.

22 MR. MERANTE: Bill Sylvester. And next  
23 will be J. Perry Pitt.

24 Bill Sylvester.

25 DR. SHUSTER: Hi. Thanks. My name is Dr.

1 William Schuster.

2 MR. MERANTE: Schuster. I'm sorry.

3 DR. SHUSTER: I am a Cornwall resident, a  
4 professional ecologist and the executive  
5 director for 27 years of the Black Rock Forest  
6 in the Hudson Highlands. In that capacity, I  
7 studied extensively Highlands ecology. I  
8 published a book chapter on the subject. I  
9 view scientific knowledge and principles to  
10 manage the 4,000-acre Black Rock Forest for  
11 decades.

12 I'm commenting on the DEIS prepared for  
13 the Hudson Highlands Reserve proposed to become  
14 Philipstown's first conservation subdivision.  
15 This is a laudable concept. And one that  
16 should help our community live sustainably into  
17 the future while conserving natural resources,  
18 if implemented appropriately. To qualify as a  
19 conservation subdivision, the zoning code  
20 states: Such projects must preserve the  
21 continuous open space, must protect with most  
22 areas with the most conservation value; in  
23 other words, those habitats critical for  
24 maintaining populations of our native species  
25 that are special conservation concern. My two

Response  
2.19

1 concerns are first, if the project, as  
2 proposed, fails to -- the continuous  
3 conservation criteria by establishing a barrier  
4 dividing the conserved parts of the project  
5 area.

6 And second, that the environmental studies  
7 to-date fail to adequately address the local  
8 amphibian and reptile species of highest  
9 conservation concern and the habitats required  
10 by these species. These two problems should be  
11 addressed first by accomplishing surveys with  
12 breeding habitats and species and the seasons  
13 necessary, particularly vernal pools during the  
14 April to May breeding season. There's no other  
15 way to know what species of concern are on this  
16 site. Wood frogs were found on the site. And  
17 these are obligant, vernal, pool-breeding  
18 species. That means there must be vernal pools  
19 on site, but no appropriate search to locate  
20 and map these habitats has yet been  
21 accomplished in the March to April time period  
22 when they must be evaluated.

23 The Philipstown community should know  
24 whether or not vernal pond requires species of  
25 state-level conservation concern, like the

Response  
3B.34

Response  
3B.14

Response  
3B.22

1 marbled and spotted salamander and other  
2 wetlands required threatened species like the  
3 wood turtles are on site.

4 The DEIS, as it stands, has not presented  
5 appropriate surveys to draw conclusions on  
6 this.

7 MR. MERANTE: Thank you, sir. Karen Ertl  
8 is up next.

9 MR. PITT: I'm Perry Pitt. I represent  
10 the Hudson Highlands Audubon Society  
11 (indiscernible) in the area. We appreciate the  
12 thoughtful concern that the Philipstown  
13 planning board is giving to the proposed Hudson  
14 Highlands Reserve conservation subdivision  
15 property.

16 The lack of the town's adopted  
17 conservation goals in 2017 is our position that  
18 DEIS wildlife assessment for this project does  
19 not include essential and sufficient monitoring  
20 procedures. The field site did not cover  
21 breeding and nesting times for most species,  
22 and do not cover a long enough period of time  
23 to establish the biological diversity's land  
24 support what species breed and nest on the  
25 site. The DEIS, the wildlife sightings and



Response  
3B.42

1 existing conditions are included with four  
2 field dates: Visits on May 6th and 26th, July  
3 9th and August 1st, 2015. Four field study  
4 visits are simply too short a time span to  
5 conduct meaningful quantity on birds, gather  
6 some breeding and bird surveys and counts for  
7 birds to determine they are not nesting have  
8 not been or not done. We ask the town planning  
9 board to consider this as a conversation  
10 project as the first of many. It must be an  
11 environmental model with real seasonal  
12 monitoring and assessments for environmental  
13 standards and limits. And any future projects  
14 must also adhere to the consideration of the  
15 town. Thank you.

16 MR. MERANTE: Thank you. And Irene  
17 O'Garden is next.

18 MS. ERTL: Good evening. My name is Karen  
19 Ertl. I'm a resident of Garrison.

20 And on this evening, I want to remind  
21 everybody in the room that almost two years ago  
22 today, the town of Philipstown signed a climate  
23 smart community agreement. Just a few weeks  
24 ago, the county unanimously voted in a climate  
25 smart community county. The agenda of that

1 initiative is to look for ways to be smart  
2 about our climate and our development. And  
3 while a -- I understand and accept that  
4 development is inevitable, and I want to  
5 commend the board for doing an environmental  
6 impact report. I think now the rubber hits the  
7 road. There are two legislations, two  
8 bipartisan legislations in the state of -- I'll  
9 give you the numbers. I'll leave them with  
10 you. These two pieces of legislation would  
11 strengthen the protection of local wetlands and  
12 streams. Current DEC protection only covers  
13 areas that encompass 12.4 acres or more. And  
14 it has to be on a DEC approved grant. New York  
15 State is the only state without such corridors  
16 for small wetlands. More than a million  
17 species are at risk. This legislation would  
18 protect smaller wetlands, rivers, streams,  
19 creeks, lakes, and wildlife. So I encourage  
20 you not to hurry this project through, but to  
21 see what the State of New York is doing to  
22 protect our small wetlands.

23 I want to also ask you to, please,  
24 understand that you are setting the precedent  
25 for what a conservation subdivision looks like

Response  
3A.2b

## HUDSON HIGHLANDS RESERVE

1 in the town of Philipstown. We will be hearing  
2 from future developers: They did it then, we  
3 have -- we can do it now. We know that for a  
4 fact. So I just want to commend you for what  
5 you're doing. But I also want to caution you:  
6 We need to do it right the first time. Thank  
7 you.

8 MR. MERANTE: Thank you. Andy Galler is  
9 up next.

10 MS. O'GARDEN: Hello. I'm Irene O'Garden.  
11 I live in Garrison.

12 But we lived -- I know this land so well.  
13 I know this pond so well. I swam it. We were  
14 there for 12 years. I walked much of this  
15 property. I can tell you as it says in the  
16 environmental impact statement: Most of the  
17 observed wildlife is right around that pond --  
18 Kingfishers and geese and all that. So one of  
19 the things I would like to see happen is those  
20 five houses be removed from the Website of the  
21 pond and conserve what is irreplaceable. I  
22 fully support the Highland Land Trust at eight  
23 recommended actions.

24 I'm also concerned about -- according to  
25 the page 38, 39, the critical make of the

1 environmental impact statement, "The critical  
2 maintenance of the pond, storm water  
3 management, waste water is going to be the  
4 responsibility of a homeowners' association."  
5 So I looked this up. What -- what is a  
6 homeowners' association? What is this actually  
7 like, a nonprofit organization. People get  
8 elected to the boards. It's generally a  
9 volunteer thing. And I'm sure that people who  
10 live in New York City and have a second home  
11 might want to get really involved in the  
12 homeowners' association. They might just want  
13 to hire a management company which plenty of  
14 people do.

15 And it's very difficult to have any kind  
16 of legal proceedings against that. I looked it  
17 up on the New York attorney general's Website.  
18 So one of the things that makes the land so  
19 attractive is the land that my husband and I  
20 donated: 27 acres that's right next to it that  
21 then became Clove Creek Preserve. So I -- I  
22 just wanted to say that conservation -- Anyway,  
23 I say -- also there's a frequent mention on  
24 this about exotic and invasive species list.  
25 Remember that humans, too, can be a pretty

Response  
3A.18

1       invasive species. Sustainable houses are a  
2       worthy goal. Let us sustain the habitats that  
3       surround them. Let us have our first  
4       conservation subdivision serve as a model for  
5       those to come after. Because some day, we will  
6       be absent. Our decisions will live on.

7               MR. MERANTE: Thank you. Next one up  
8       after Andy Galler is Mickey Deneher.

9               MR. GALLER: Good evening. I'm Andy  
10       Galler. I'm a member of the conservation  
11       board. And I live about as far away from the  
12       project in southern Garrison as one can in  
13       town.

14               So I read the binder from cover to cover.  
15       I'm very familiar with the project. Basically,  
16       the intent of SEQRA is very, very specific.  
17       And that is for the applicant, the developer,  
18       to work with concerned agencies and the  
19       community to balance environmental impacts with  
20       the effects that would happen on the economy  
21       and social aspects. And looking at the draft  
22       environmental impact statement, I was  
23       exceedingly disappointed, if you compare it,  
24       and I'm going to ask the planning board and  
25       their experts to focus on this tremendously.

1 It is to take the scoping document, and then  
2 look at the draft environmental impact  
3 statement. I think what you'll find is huge  
4 areas of inefficiency, old data, questions not  
5 asked, and alternative plans cherry-picked; so  
6 they are not really realistic.

7 Number two, I want everybody to look at  
8 the economics of the project. The housing  
9 market is flat. And it's probably going to  
10 remain flat, not so much abuse of economy, but  
11 we no longer have the \$10,000 reduction. And  
12 millennials really don't want houses. So, all  
13 of a sudden, we have a complex that has intense  
14 mitigation that needs to be kept up  
15 continually. What happens if only two houses  
16 are sold or even only 10? Is this feasible?  
17 Who is going to take care of it after that? I  
18 really ask the planning board and everybody  
19 else to think about that. Thank you.

20 MR. MERANTE: Thank you. After Mr.  
21 Deneher Matt Goldsmith.

22 MR. DENEHER: Mickey Deneher.

23 The idea is not to say no, but how do we  
24 say yes. That's the whole idea.

25 I'm here 18 years. I love Philipstown,

Response  
2.22

Response  
2.34

1 and I love how everybody takes care of it and  
2 so do you. My concerns are also the scale and  
3 the concentration of the houses and the  
4 equestrian center.

5 One of the things I've been thinking about  
6 is that equestrian center is an open to the  
7 public. So what's really the volume there?  
8 The houses, will they in fact become Airbnbs?  
9 What volume could be there? All right. We  
10 talked about a traffic study; the amount of  
11 accidents that have been happening lately are  
12 just too much. I mean, 9 gets closed down all  
13 the time. When we put that in and then we talk  
14 about the manure, and manure is held on site  
15 for 14 days. That's almost 20 tons of -- well,  
16 I don't want to say it, but we know what it is.  
17 And then it's got to be transported out. And  
18 then what happens if there's a problem on 9  
19 with that?

20 So I ask the board again -- and again to  
21 these guys here, we don't want to say no. We  
22 want to say yes. We want to see Philipstown go  
23 forward, but we want to see Philipstown  
24 maintain the beauty that everyone here believes  
25 in, and I know you do too. Thank you.

Response  
2.23

Response  
3A.9

1 MR. MERANTE: Matt Goldsmith and then  
2 Goldee Greene. Matt Goldsmith. Goldee Green.

3 MR. ZUCKERMAN: She was here for the gas  
4 station.

5 MR. MERANTE: Okay. Evan Thompson and  
6 after him, it will be John Benjamin. John.

7 MR. BENJAMIN: Good evening. Thank you  
8 for this opportunity. My name is John  
9 Benjamin. I was born down in Butterfield  
10 Hospital about 74 years ago. So I'm somewhat  
11 local.

12 I want to talk -- I want to talk briefly  
13 about manure and travel. And, really, I know  
14 nothing about horses. But Rutgers University  
15 does. And I refer you to their study, the  
16 Rutgers Equine Science Center did, a document  
17 -- you can look at it online. A document was  
18 labeled Horses and Manure, Fact Sheet No. 036.  
19 I was astounded to read that the average  
20 thousand pound horse produces 10 to 12 tons of  
21 manure a year. I'm not saying this; they're  
22 saying this. That's -- do the math. Forty  
23 horses, that's 400 to 480 tons of manure a  
24 year.

25 It's also interesting that the state of



Response  
3A.8

1           New Jersey considers such large commercial  
2           equine centers to be concentrated animal  
3           feeding operation, CAFOs. You might know, if  
4           you know anything about pigs and chickens,  
5           which are tightly regulated by the state in the  
6           hopes of preventing NTK nutrient pollution,  
7           as well as vermin and pathogen introduction  
8           into adjacent aquifers, wetlands, ponds, and/or  
9           streams. CAFOs are essentially (indiscernible)  
10          On the other hand, not knowing much about  
11          horses, I do know a great deal about trout and  
12          brook trout. And I know a great deal about  
13          clean, clear streams, and good fishing. I was  
14          born and raised in the area. And as kids, we  
15          fished many of the small brooks; sometimes  
16          lucky enough to lure out a little brookie or  
17          two. As a guide in Colorado and as a travel  
18          limited member --

19                 MR. MERANTE: John.

20                 MR. BENJAMIN: -- my knowledge has grown  
21          over these 73 and a half years.

22                 MR. MERANTE: Thank you. I haven't read  
23          that. Make sure that we get a copy of that.

24                 MR. BENJAMIN: I already sent it.

25                 MR. MERANTE: Okay. Thank you.

1 Adam Hird. And then next will be Richard  
2 Butensky.

3 MR. HIRD: I'm Adam Hird. I live at 63  
4 Horton Road. And I'm the -- actually a  
5 professional real estate developer. I  
6 developed well over 4 million square feet.

7 And I've actually never seen a project get  
8 this far along without a traffic study. My  
9 understanding is that the state has denied  
10 direct access online. And as we stand here  
11 today, we don't know how they are accessing the  
12 property. We talked about traffic and its  
13 impact on Route 9. But we also know that East  
14 Mountain Road and Horton Road are tight roads.  
15 You know, 25 more homes and horse trailers, and  
16 what sounds like a commercial facility on the  
17 weekends and, you know, who knows what's going  
18 on.

19 So, in my opinion, it really needs to sort  
20 of slow down. There needs to be a traffic  
21 study, and the access needs to be figured out  
22 before we can go any further. It's just a  
23 safety issue. Thank you.

24 MR. MERANTE: Thank you.

25 MR. BUTENSKY: Hi. Name is Richard

Response  
2.90

1 Butensky. I think you all heard enough from me  
2 already. But I just want to go over a couple  
3 of things.

4 The law says that an applicant may  
5 increase the permitted number of dwelling units  
6 by use of density bonus granted at the  
7 discretion of the planning board. The  
8 applicants seem to think they have a right to  
9 it, but it's at your discretion. The maximum  
10 -- the formula, you know, and the density bonus  
11 is described -- as described shall not be  
12 considered an entitlement. That's what the law  
13 says. It's not an entitlement. It seems that  
14 some people think it is. Preserved open space  
15 must not result in fragmentation of the open  
16 space land in a manner that compromises its  
17 conservation value. It says that in the law.  
18 I think it's been compromised. The  
19 configuration of the open space land and  
20 dwellings shall not result in fragmentation of  
21 the open space land in a manner that interferes  
22 with its proper management and protection of  
23 its conservation values. The final  
24 determination as to which land has the most  
25 conservation value and should be protected from

Response  
2.28

Response  
3B.54

Response  
2.44

1 development by conservation easement shall be  
2 made by the planning board. It's not made by  
3 the developer. It's made by the planning  
4 board. That's in the law.

5 MR. MERANTE: You're eating into your  
6 time.

7 MR. BUTENSKY: Excuse me?

8 MR. MERANTE: I said you're eating into  
9 your time.

10 MR. BUTENSKY: There's -- there's an old  
11 joke. This guy prays to win the lottery every  
12 day. He prays and he prays and he prays. And  
13 he said -- day and night three times a day, he  
14 prays. Finally, after years and years, he  
15 says, I'm such a good man. I'm a pious man. I  
16 do everything. Finally, one -- he's there  
17 praying and he hears a voice, and it's God. He  
18 says, meet me halfway. Buy a ticket.

19 They need to buy a ticket. This is --

20 MR. ZUCKERMAN: Yeah. We get it. All  
21 right. All right. All right. All right. All  
22 right.

23 MR. MERANTE: Hadrien Coumans and next  
24 will be Madeline Rae.

25 MR. COUMANS: I'm here representing a

1 family that has been indigenous to this area  
2 for 12,000 years. I'm co-director of Lenape  
3 Center, an indigenous organization.

4 We've been praying on this mountain since  
5 2005. "We" meaning the elders coming from  
6 Oklahoma, Wisconsin, Canada, South Dakota,  
7 Arizona, New Mexico. And we know that this is  
8 a place of great sacral significance. This  
9 mountain should be left in peace. I'm part of  
10 an effort to bring the people home, the  
11 original people. We don't want this type of  
12 disrespect to continue anymore. It's time to  
13 respect what we have in terms of our  
14 responsibility to it, and stop playing around  
15 with ideas of short-term thinking and  
16 short-term profit that only enhance the lives  
17 of, maybe, a minority and a few. We are all in  
18 this together, but at the end of the day, this  
19 is indigenous homeland. This is land that has  
20 deep spiritual, religious significance, and it  
21 must be left alone. (Not speaking in English.)  
22 Thank you.

23 MR. MERANTE: Madeleine Rae. And next  
24 will be Allan Brownstein.

25 MS. RAE: Hi. Good evening. My name is

1 Madeline Rae. Thank you very much for giving  
2 me this opportunity to speak on the project.

3 MR. MERANTE: Microphone --

4 MS. RAE: Can you hear me now? Okay.

5 Thank you.

6 When I first was looking into the LLC that  
7 is behind this project, I was taken aback that  
8 they didn't put their names to it, and it was a  
9 blind LLC. So I looked at the architect whose  
10 name is on the whole filings, and his address  
11 matches the address of the LLC. It's the same  
12 one. It's in the New York 91st Street. And  
13 also that address is shared with the  
14 construction company.

15 So, right now, I know who the developers  
16 are, and who they are because they are all  
17 living together and working together in New  
18 York City. And not that that's a crime or that  
19 shouldn't be done or developed, but it seems to  
20 me that these people can move this development  
21 anywhere the cons tonight outweigh the pros.  
22 They live in New York City. They are just  
23 looking for a place to put an equestrian  
24 subdivision. Equestrian subdivisions are the  
25 latest fad in subdivisions in America,

Response  
2.7

1 California, Texas, Florida, the Carolinas. Golf  
2 subdivisions now are played; they are  
3 saturated.

4 So, now, they are doing subdivisions with  
5 horses. And these are first-time builders of  
6 this subdivision. If you go on the architect's  
7 Website, there's not a 25 one-acre home  
8 development on the site. The construction  
9 company, there's not a 25-acre 25-home one-acre  
10 development. There's not an equestrian center.  
11 The architect says on the site that he is the  
12 general contractor of all of these projects  
13 which include homes interiors.

14 So I don't know how this is our first  
15 project. And it seems to me we have to trust  
16 these first-term developers who are just  
17 looking for a fad. They are just developers to  
18 make money, promising us a lot of tax dollars.  
19 But if this development turns into a 501C, does  
20 that have an implication on our tax dollars? I  
21 don't know. You all don't have a crystal  
22 ball --

23 MR. MERANTE: Thank you.

24 MS. RAE: But I will say you have the  
25 responsibility to pass the baton as stewards to

1 the next --

2 MR. MERANTE: Thank you. Ellen Brownstein  
3 and next is Mike Casal.

4 SPEAKER: Good evening. My wife Patty and  
5 I moved here in 2015 after we decided, in 2005,  
6 that we were determined to move here. And we  
7 live in Glasbury Court which is less than 1  
8 mile from the site. And we live with 200 other  
9 -- nearly 200 other residents.

10 And I don't know the -- all the views of  
11 whether the residence of Glasbury Court support  
12 or oppose this project. But I do know that  
13 there is considerable concern. And that  
14 concern, I noticed, as I walked in here  
15 tonight, a number of people from Glasbury Court  
16 who are here -- would you please raise your  
17 hand if you are from Glasbury Court.

18 MR. MERANTE: Please keep it this way.

19 SPEAKER: Okay. Thank you. But my point  
20 to the board is that there is a -- a large  
21 community here where there is considerable  
22 concern about the decision that is being made.  
23 And the expertise that is here, and the process  
24 that is going on here is -- is excellent, and  
25 it's -- it's important to avoid a mistake with



1 this decision, because once a mistake is made,  
2 it cannot be undone.

3 And I just want to close by asking if --  
4 if people know the difference between an  
5 optimist and a pessimist. And the answer is  
6 simple: The pessimist has better data. And I  
7 think it's important tonight that I'm impressed  
8 with how many of the -- many of the questions  
9 that are being raised are data driven. And I'm  
10 looking forward to a -- a good discussion by  
11 this planning board; so thank you.

12 MR. MERANTE: Thank you.

13 MR. ZUCKERMAN: I make a motion requesting  
14 all our speakers end their commentary on a  
15 humorous joke --

16 MR. MERANTE: You have to leave early.

17 Mike Casal. David Gorton, Mike Casal.  
18 David Gorton. No.

19 And our last speaker is Ann Hammond. Oh,  
20 David.

21 MR. GORTON: I'm sorry. It's a long way  
22 back there. Okay. Thank you, and -- to the  
23 board for taking my comment. And thank you for  
24 holding this important review of the Hudson  
25 Highlands proposal.

1           On the surface development of only 39  
2           acres of a 210-acre site sounds ideal. But the  
3           devil is in the details, usually. There's good  
4           reason that 171 acres are left undeveloped and  
5           are not going to be ever developed. And those  
6           acres tend to be on terrain that's too steep or  
7           too wet to be considered. The proposed  
8           development of 25 LEED platinum level certified  
9           homes and 40-horse barns dressage complex will  
10           effectively split the 210 acres in such a way  
11           as to preclude the natural and safe passage of  
12           any wildlife along this corridor. And poor old  
13           Clove Creek takes yet another hit from  
14           magnitude that it can ill-afford. Perhaps,  
15           someone could explain the section in the draft  
16           environmental impact statement of Sections  
17           D.2.C entitled, Forest Fragmentation Ingress.  
18           It concludes -- it's concluding sentence  
19           states, quote, There will be no true  
20           fragmentation though there will be some habitat  
21           perforation. The use of the adjectives "true"  
22           and "some" seem to be quite telling, sounds a  
23           bit like being a little pregnant.

24           In conclusion, we here in Philipstown have  
25           more than 25 of these designated conservation

Response  
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Response  
3B.34,  
3B.54

Response  
A.11

Response  
3B.67

## HUDSON HIGHLANDS RESERVE

1 subdivisions. Let us not lower the bar so, for  
2 example, in this the first test of this  
3 enlightened zoning mechanism. Thank you.

4 MR. MERANTE: Thank you, David. Ann  
5 Hammond.

6 MS. HAMMOND: Yes. Hi. My name is Ann  
7 Hammond. My family has lived on East Mountain  
8 Road South for the past 50-plus years. And I  
9 wrote you, guys, an excellent letter last year.  
10 I just re-read it. It was great. What can I  
11 say. Not one point on it was addressed on the  
12 DEIS or anyway nothing was changed in the plan.  
13 And I have also visited upon you a seven-page  
14 letter; so I don't repeat any of that.

15 MR. MERANTE: Did we get a copy of it?

16 MS. HAMMOND: Yeah. I already did. I  
17 dropped it off yesterday and emailed it to you  
18 a day ago.

19 So what I realized is that one thing no  
20 one has mentioned; possibly someone has thought  
21 about, but we talked about the tonnage of  
22 manure going out. Well, this is a completely  
23 unsustainable environmentally. This project is  
24 unsustainable. Everything those horse eat has  
25 to come in too. Because they can't live on 11

Response  
3A.9

1        acres. In fact, they are not even really  
2        allowed out. So we'll leave aside the fact  
3        that these are actually sensitive property  
4        animals that need to graze for health.

5                That's not the point of the DEIS although  
6        it is, in my opinion, inhumane. But all of  
7        that food has to come in on great big trucks  
8        because they are not grazing out there on that  
9        land. So how many thousands of pounds of poop  
10       is going out? Well, just as many as coming in  
11       great big trucks on those two tiny little roads  
12       that you can barely get out of already, because  
13       we know now that the DOT is not letting them  
14       out on Route 9. I think there is a lot that  
15       has yet to be considered about this project,  
16       and I don't like how, casually, all of the  
17       assumptions that it will all be okay are being  
18       made in the document. That's all.

19                MR. MERANTE: Thank you. Steven Loria.

20                MR. LORIA: Hi. My name is Steven Loria.  
21        I live in Cold Spring Philipstown, East  
22        Mountain.

23                I just first wanted to make a point that I  
24        did submit a letter back in February 2018. I  
25        just want to re-submit that, the same comments.

1 I don't have the time to restate all the  
2 already made points in the Hudson Highlands  
3 Land Trust and all the public -- public  
4 comments, letters, and points made against the  
5 project. However, I am in complete agreement  
6 with those arguments that are made. And just  
7 like to state that.

8 I also want to highlight the points raised  
9 by other concerned citizens here in Philipstown  
10 including the individual from the New York City  
11 Trails Conference and the impact on our views.  
12 I think that it's really important to consider.  
13 I also support the comments made tonight about  
14 how this project is completely inconsistent  
15 with the Philipstown comprehensive plan and  
16 existing code related to the subdivision. This  
17 project will set a horrific precedent on future  
18 development to be considered under that.

19 Several other points that I just wanted to  
20 also reiterate are the deleterious impact on  
21 our water aquifer as well as the amount of  
22 water the project will be consuming with 25  
23 houses and 40 horses. The numbers mentioned  
24 are astonishing. The manure that those horses  
25 will produce is also a significant reason not

Response  
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Response  
3A.11

1 to allow this development as it is. The  
2 traffic situation and how the DOT comments will  
3 be addressed, I'd like to know.

4 I'm very concerned if the decision is to  
5 move access to East Mountain Road North,  
6 because I understand, access from Route 9 is  
7 not an option any longer. And I wonder how  
8 that will create a more dangerous situation  
9 already that exists for those people are making  
10 left turns on East Mountain Road North on Route  
11 9, it's already really dangerous. Cars are  
12 passing you on the right. And they are hitting  
13 people. It's -- it's extremely dangerous for  
14 me to make that left. And all of our neighbors  
15 make that left turn. It really needs to be  
16 considered. So will this board, if it allows  
17 that type of access, will it consider and take  
18 responsibility for the accidents that that may  
19 cause. Thank you.

20 MR. MERANTE: Before we finish, one of our  
21 -- Aaron will tell us how we proceed further.

22 MR. WERNER: Sure. So there's no more  
23 speakers --

24 MR. ZUCKERMAN: There's a guy over here.

25 MR. MAJESKI: I apologize. I didn't see

Response  
2.85

## HUDSON HIGHLANDS RESERVE

1 the list when you come in.

2 MR. MERANTE: State your name.

3 MR. MAJESKI: Can I take the two minutes?

4 MR. MERANTE: Yeah.

5 MR. MAJESKI: Thank you.

6 MR. MERANTE: What is your name?

7 MR. MAJESKI: So my name is -- I apologize  
8 for the gentleman's time. My name is Craig  
9 Majeski [ph.] And I live at the very bottom of  
10 the proposed plan of where the road would  
11 enter. In purchasing my home two and a half  
12 years ago, I had no idea, no plan, there is no  
13 sign, there is no proposal that there would  
14 ever be 25 homes and an equestrian center  
15 across from the 9 acres of property that I  
16 purchased. Nor would I put my family's life  
17 savings into a home that was abandoned,  
18 essentially, to know that suddenly 25 homes  
19 would be across the street from me.

20 But that being said, in our first year  
21 there, we called the sheriff's department, and  
22 45 minutes later someone showed up. Has  
23 Philipstown or Putnam County put any plan in  
24 place for fire, additional police, ambulance,  
25 or anything to assist these homeowners?

1 Because at the moment, when you call, it's all  
2 volunteer for the fire, the sheriffs are very  
3 stretched, and the ambulance are also  
4 volunteer.

5 And my last point is: Have we thought  
6 about the mental health of the people of this  
7 community? The noise, the traffic, the anger,  
8 that this will bring upon the people within  
9 that area? You really have to think about the  
10 mental health of what people will feel, the  
11 stress on the road there constantly, and the  
12 sound of chainsaws every day drilling, all of  
13 that noise, I really take that into  
14 consideration. And there is a reason that all  
15 these people pointed out several things here.  
16 The law. The law is in place to protect land,  
17 and what you're here. Those laws were written  
18 for reasons. And you're here to uphold those  
19 laws. And I really hope you do.

20 MR. MERANTE: Now, our adviser from AKRF,  
21 Aaron Werner, will tell us where to go from  
22 here.

23 MR. WERNER: Can you hear me okay? Okay.  
24 Great.

25 I just wanted to point out, because a lot

Response  
3D.3



## HUDSON HIGHLANDS RESERVE

1 of stuff was raised about the DOT comments. So  
2 in addition to the public comments that we are  
3 hearing tonight, they are coming in in written  
4 form, as well, by the July 8th deadline. The  
5 DEIS was also circulated to the interested and  
6 involved agencies after it was accepted last  
7 month. And so far, there's been -- the DOT  
8 comments again that came this month requesting  
9 some additional information from the  
10 applicant's traffic consultant, among other  
11 items. Since these comments came from an  
12 involved agency, the applicant is required to  
13 address those for the final EIS. And my  
14 understanding is that they have already agreed  
15 to do that. So as far as the next steps here,  
16 the July 8th deadline is for written comments;  
17 that will remain open. Once that is expired,  
18 all these comments that have been given tonight  
19 which have been recorded by the stenographer  
20 which are also on video and written form will  
21 be compiled by the applicant, their  
22 consultants. They will share those with the  
23 board's consultants for review prior to  
24 releasing them to you, guys, to review them for  
25 official release on preparing the FEIS. So at

1 the July meeting, there should be a set of  
2 comments put together by the team, the  
3 applicant team, reviewed by the board  
4 consultants first, given to you. And then at  
5 that meeting, you can officially release them  
6 to address those for the FEIS. Now, the FEIS,  
7 SEQRA regulations have a minimum 45 days from  
8 the end of the public hearing is when the FEIS  
9 should be filed, but that can also be extended  
10 under circumstances, should it be necessary.  
11 We'll have to see, you know, at the next  
12 meeting if we need to do that. But for now,  
13 these comments will be all compiled and shared  
14 with the consultants first. And then we will  
15 talk about them in the July meeting.

16 MR. MERANTE: Okay. And all of these will  
17 be ready for public review as of when?

18 MR. WERNER: So the -- after the July 8th  
19 deadline, in between then and the July 18th  
20 meeting, I believe, is the next meeting. Those  
21 comments should all be put into written form by  
22 the applicant team, summarizing what's been  
23 heard tonight, what's been sent in writing, and  
24 they categorize them by topic in the DEIS. And  
25 then those should be shared with the

## HUDSON HIGHLANDS RESERVE

1 consultants. We will review those before  
2 giving you, guys, those at the -- before the  
3 meeting on the 18th. And then on the 18th, we  
4 will review them all as a group and decide if  
5 we want to go ahead and give them the green  
6 light to go ahead and address those for the  
7 final EIS.

8 MR. MERANTE: Okay.

9 MR. MAJESKI: Steve, is there anything  
10 on --

11 MR. GABA: I would just like to point out  
12 to everyone who spoke tonight, the board  
13 necessarily had to limit the amount of time  
14 because of the great number of people who are  
15 here. But as Aaron alluded to the written  
16 comment period is open until July 8th. So if  
17 anyone had something that they wanted to say,  
18 that they didn't get a chance to get out in  
19 their two minutes or if they just want to  
20 reinforce what they said, you can submit  
21 written comments to the board through July 8th.  
22 Get a piece of paper, write down whatever you  
23 wanted and, you know, your comments will be  
24 considered.

25 And what Aaron was speaking about as far

1 as the next step, is that in order to prepare  
2 the final environmental impact statement, the  
3 FEIS, the applicant has to put together every  
4 comment and question that has been raised, and  
5 then address that in the document that -- the  
6 FEIS.

7 So what's going to happen next is we're  
8 going to get a compilation of all the comments  
9 that you heard. We want to make sure that all  
10 the comments are included within it. So if  
11 something that's left out, you know, say what  
12 about, I don't know, whatever it may have been,  
13 whatever issue that hasn't been covered, well,  
14 that has to be in the FEIS as well.

15 When you are satisfied that all of the  
16 comments and all of the issues raised are in  
17 that, then you get a green light to prepare the  
18 FEIS. And that's what's going to happen.

19 MR. MERANTE: One last -- go ahead, Neal.

20 MR. ZUCKERMAN: So that sounds like an odd  
21 process. The public speaks. The applicant  
22 writes down what the public said about the  
23 project which is --

24 MR. GABA: Well, the steno does. But --

25 MR. ZUCKERMAN: Okay. But I'm just --

1           it's strange that -- that in this group, people  
2           says [sic] that -- I mean, I'm not going to  
3           characterize the comments. But we heard the  
4           comments. So these people are going to write  
5           down what those people said about their  
6           project, and come back and tell us that's what  
7           they said about the project?

8           MR. GABA: No. They are going to address  
9           the comments.

10          MR. ZUCKERMAN: Who is writing down a list  
11          of all the comments?

12          MR. GABA: Well, they are.

13          MR. ZUCKERMAN: That's what I'm saying.  
14          You're saying you're going to write down a list  
15          of all the things that these people criticized  
16          about the project.

17          MR. GABA: You are going to have a  
18          stenographic record as well --

19          MR. ZUCKERMAN: Okay.

20          MR. GABA: -- to review. And you can see  
21          what's in it.

22          So and then they are going to -- they are  
23          going to say these are all of the items. You  
24          can see what was raised. And then they are not  
25          just going to say that's what was raised.

1 That's the first step. The second step in  
2 preparing the FEIS is to address that, and say  
3 oh, this is where the issue of, I don't know,  
4 manure is coming. Manure. This is where  
5 manure is addressed in the DEIS. And here's  
6 additional studies or comments, whatever it  
7 might be, that show the --

8 AUDIENCE MEMBER: Excuse me. What's an  
9 FDIX, or whatever. Please say what it is  
10 rather than an acronym.

11 MR. GABA: Well, madam, I already did. I  
12 said it's a final environmental impact  
13 statement. No offense, but I already did.  
14 FEIS.

15 So that document would be put together in  
16 saying how those were addressed and why. Those  
17 potential environmental impacts are being  
18 mitigated and how they are being mitigated.  
19 That's a step beyond what's going to happen.

20 MR. MERANTE: Our engineer --

21 MR. GAINER: Already by the consultants,  
22 all the comments received, all verbal, and all  
23 written comments are going to be assembled.  
24 That's going to be done through the planning  
25 board secretary who will receive the

## HUDSON HIGHLANDS RESERVE

1 stenographic record. And then, formally, the  
2 board is going to submit that to the applicant  
3 and ask them to respond.

4 There's going to be a significant effort  
5 to put together all these comments. We assure  
6 you the compilation is complete, and that it's  
7 formally transmitted from the planning board as  
8 lead agency to the applicant with the direction  
9 to respond to all comments raised.

10 MR. MERANTE: Okay. And --

11 MR. WERNER: We are giving the applicant  
12 the first crack at compiling the comments for  
13 review by the planning board, approving them,  
14 and then going and addressing them after the  
15 July meeting.

16 MR. MERANTE: Okay. Any further comments  
17 from members of the board? Neal?

18 AUDIENCE MEMBER: What happens then? July  
19 18th, is that it?

20 MR. MERANTE: No.

21 MR. WERNER: No, it's not. July 18th is  
22 when the board will officially release a set of  
23 comments for the applicant to address in the  
24 final environmental impact statement which  
25 could take a while to -- to develop.

1           But in that document, there will be  
2 responses to all the comments raised. There  
3 will be responses to the DOT issues, and any  
4 other involved agency comments that come in  
5 between now and July 8th.

6           MR. MERANTE: Kim.

7           MS. CONNER: I think I'm going to submit  
8 comments in writing.

9           MR. GABA: That's fine.

10          MR. WERNER: The board -- yeah, the board  
11 is welcome to also submit comments by July 8th,  
12 and the consultants are also going to have some  
13 comments as well.

14          MR. MERANTE: Thank you. Make a motion to  
15 close the public hearing.

16          Anyone?

17          AUDIENCE MEMBER: Can I ask a question?  
18 When -- when was the earliest date that  
19 the conclusion can be reached on this?

20          MR. ZUCKERMAN: Move up to the mic, Peter.

21          SPEAKER: We're not taking questions.

22          MR. HOFFMAN: I just have a brief  
23 question.

24          MS. CONNER: Talk into the mic.

25          MR. HOFFMAN: I'm Peter Hoffman [ph.] And



## HUDSON HIGHLANDS RESERVE

1 I live in Garrison. I just -- when do you  
2 anticipate --

3 MR. MERANTE: We don't. We don't.

4 MR. HOFFMAN: -- there to be a conclusion  
5 to these deliberations.

6 MR. MERANTE: There is deliberations  
7 that's why we don't conclude. I'm sorry. We  
8 can't give you more of a definitive answer.

9 MR. GABA: Well, let me see if I can  
10 clarify just a little bit as far as -- well,  
11 aside from the traffic, as far as the days go,  
12 the way that it works is the final  
13 environmental impact statement will be prepared  
14 by the applicant and submitted to the board.  
15 The board will consider it much like he  
16 considered the DEIS and determined whether or  
17 not to accept it. Whether or all the comments  
18 have been adequately addressed, all the issues  
19 were addressed in that.

20 And then once they accept that, the board  
21 will go on to consider a document called the  
22 finding statement. And the finding statement  
23 is going to determine whether or not all of the  
24 identified potentially significant adverse  
25 environmental impacts have been mitigated to

1 the maximum extent practicable, or if they  
2 haven't been, do you have to make changes to  
3 the plan in order for that to occur. Or if  
4 they can't be, whether the applicant should be  
5 denied because they are not. So the finding  
6 statement is I think the penultimate step  
7 before determination is made on this, and we  
8 can't give you a time as to when that's going  
9 to occur. The process by which this can be  
10 reached, you can't say it will be by August or  
11 September or something like that. It's going  
12 to depend, in large part, on how soon the  
13 applicant turns around submitting the FEIS and  
14 when it's complete, once it's submitted.

15 MR. MERANTE: Okay. Do we have a motion  
16 on the floor to close the public hearing cause?

17 MS. CONNER: I make that motion.

18 MR. MERANTE: Second?

19 MR. TOMANN: Second.

20 MR. MERANTE: All in favor?

21  
22 (A chorus of "ayes.")

23  
24 MR. MERANTE: Thank you.

25 (Time noted: 9:12 p.m.)

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**C E R T I F I C A T E**

I, Douglas F. Colavito, a Certified Court Reporter and Notary Public of the State of New York, do hereby certify that the transcript of the foregoing proceedings, taken at the time and place aforesaid, is a true and correct transcription of my shorthand notes.

*Douglas F. Colavito*

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**DOUGLAS F. COLAVITO**

	<b>48:11</b>	<b>adequately (6)</b>	<b>AKRF (1)</b>	<b>and/or (1)</b>
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	<b>Accordingly (1)</b>	<b>adjacent (1)</b>	31:16	73:7
	17:23	58:8	<b>Allan (1)</b>	<b>animal (1)</b>
<b>[ph] (2)</b>	<b>account (1)</b>	<b>adjectives (1)</b>	62:24	58:2
72:9;81:25	10:15	67:21	<b>allow (3)</b>	<b>animals (1)</b>
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5:9,17;39:10;78:2	28:4;29:10	49:16	<b>allowed (1)</b>	<b>Ann (5)</b>
<b>A</b>	<b>achieve (1)</b>	<b>advance (2)</b>	69:2	13:3,4;66:19;68:4,6
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<b>V</b>	<b>visited (1)</b> 68:13	<b>weekends (1)</b> 59:17	<b>win (1)</b> 61:11	<b>wraps (1)</b> 11:9
<b>vague (1)</b> 42:5	<b>visitor (1)</b> 35:4	<b>weeks (1)</b> 50:23	<b>winding (1)</b> 18:10	<b>write (3)</b> 76:22;78:4,14
<b>validated (1)</b> 5:11	<b>Visits (2)</b> 50:2,4	<b>Weisholz (1)</b> 32:18	<b>winter (1)</b> 38:11	<b>writes (1)</b> 77:22
<b>Valley (1)</b>	<b>voice (4)</b> 5:15;22:17,25; 61:17	<b>welcome (1)</b> 81:11	<b>Wisconsin (1)</b> 62:6	<b>writing (5)</b> 9:13,18;75:23; 78:10;81:8
	<b>volume (2)</b> 56:7,9	<b>welfare (1)</b> 25:8	<b>wish (1)</b> 3:22	<b>Written (11)</b> 3:18,21;18:3; 73:17;74:3,16,20; 75:21;76:15,21; 79:23
	<b>volunteer (4)</b> 22:21;53:9;73:2,4	<b>well-known (1)</b> 26:15		<b>wrong (2)</b> 26:23;34:7
	<b>vote (2)</b> 4:22;5:6	<b>wells (1)</b>		
	<b>voted (2)</b> 5:4;50:24			

**HUDSON HIGHLANDS RESERVE**  
June 20, 2019

**HUDSON HIGHLANDS RESERVE**  
ROUTE 9 AND HORTON ROAD

wrote (3) 13:14;15:9;68:9	26:13	2015 (2) 50:3;65:5	47:10	8th (8) 3:19;74:4,16; 75:18;76:16,21;81:5, 11
<b>Y</b>	11-acre (1) 33:21	2017 (1) 49:17	4.5 (1) 2:14	
<b>year (6)</b> 5:3;21:7;57:21,24; 68:9;72:20	12 (2) 52:14;57:20	2018 (3) 18:18;32:6;69:24	4.5-acre (1) 3:4	<b>9</b>
<b>years (16)</b> 15:8;27:24;28:20; 30:16;38:8;47:5; 50:21;52:14;55:25; 57:10;58:21;61:14, 14;62:2;68:8;72:12	12,000 (1) 62:2	2019 (1) 18:22	40 (9) 14:11,12,12;16:22; 35:11;39:3;41:17; 42:3;70:23	9 (18) 2:6,12,16;18:15, 18;31:6,9,20;32:3,7; 37:2;56:12,18;59:13; 69:14;71:6,11;72:15
<b>yellow (1)</b> 11:1	12.4 (1) 51:13	2050 (1) 21:7	400 (1) 57:23	9:12 (1) 83:25
<b>yesterday (2)</b> 20:22;68:17	130 (1) 19:11	20th (1) 32:6	40-horse (3) 19:19;40:12;67:9	9:45 (1) 5:24
<b>York (16)</b> 18:16;21:16;23:10, 25;26:14;33:10;36:9; 41:13;51:14,21; 53:10,17;63:12,18, 22;70:10	14 (1) 56:15	210 (3) 2:5;17:18;67:10	45 (2) 72:22;75:7	91st (1) 63:12
<b>young (1)</b> 26:17	154 (1) 2:20	210-acre (1) 67:2	480 (1) 57:23	9th (1) 50:3
<b>Z</b>	154-acres (1) 2:20	25 (14) 2:24,25;16:21; 21:10,22;40:10; 41:17;59:15;64:7; 67:8,25;70:22;72:14, 18	<b>5</b>	
<b>zero (1)</b> 21:7	159.8 (2) 8:9;17:18	25-acre (1) 64:9	50 (2) 31:12;42:2	
<b>zone (3)</b> 2:13,15;29:20	16 (1) 30:16	25-home (1) 64:9	501C (1) 64:19	
<b>zoning (12)</b> 2:19;14:7;15:19; 24:7,11,14;33:15; 35:17;43:2;46:3; 47:19;68:3	160,000 (1) 37:16	25-page (1) 32:22	50-plus (2) 21:18;68:8	
<b>ZUCKERMAN (13)</b> 4:16;6:4;10:9; 57:3;61:20;66:13; 71:24;77:20,25; 78:10,13,19;81:20	16th (1) 3:12	26th (1) 50:2	516 (1) 17:9	
<b>0</b>	170,000 (1) 37:18	27 (3) 41:9;47:5;53:20	<b>6</b>	
<b>036 (1)</b> 57:18	171 (1) 67:4	28 (1) 41:14	617 (1) 18:24	
<b>1</b>	175-20 (1) 2:19	2800 (1) 42:4	62 (2) 27:23;28:18	
<b>1 (2)</b> 2:25;65:7	18 (3) 27:24;28:19;55:25	28-year (1) 26:24	63 (1) 59:3	
<b>10 (4)</b> 3:22;16:20;55:16; 57:20	18th (5) 75:19;76:3,3; 80:19,21	<b>3</b>	6NYCRR (1) 18:23	
<b>11 (3)</b> 37:9,13;68:25	18-wheeler (1) 31:12	3 (1) 16:4	6th (1) 50:2	
<b>114th (1)</b>	1st (1) 50:3	3:40 (1) 10:9	<b>7</b>	
	<b>2</b>	30 (1) 38:8	7 (1) 18:23	
	2.4 (1) 16:5	31 (1) 41:20	70 (1) 42:2	
	20 (1) 56:15	38 (1) 52:25	73 (1) 58:21	
	200 (2) 65:8,9	39 (2) 52:25;67:1	74 (1) 57:10	
	2001 (2) 15:8;28:11	<b>4</b>	75 (1) 24:4	
	2005 (2) 62:5;65:5	4 (1) 59:6	7th (1) 18:22	
	2006 (1) 15:9	4,000-acre (1)	<b>8</b>	
	2009 (1) 28:8			
	2014 (1) 18:16			

**APPENDIX B**  
**WRITTEN COMMENTS - PUBLIC**  
**& INTERESTED/INVOLVED AGENCIES**

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**HUDSON HIGHLANDS RESERVE - DEIS**

**WRITTEN COMMENTS – PUBLIC & INTERESTED/INVOLVED AGENCIES**

1	NYSDOT – Mary McCullough – NYSDOT Region 8
2	Ann Hammond
3	John Benjamin
4	Madeleine McGinley
5	Nathan Lyons – President, Harold Lyons & Sons
6	Hudson Highlands Land Trust – Executive Director, Michelle Smith
7	Rob Schneiderman
8	Ellen Dinerman
9	Betsy Calhoun
10	Virginia A. Buechele
11	Tara Vamos
12	William Schuster
13	David C. Gordon
14	Nat Prentice
15	Madeleine McGinley
16	Hank Osborn – Viewshed Pics
17	Scenic Hudson, Jeffrey Anzevine, Carli Fraccarolli
18	Putnam Highlands Audubon Society – Connie Mayer-Bakall, J. Perry Pitt
19	Karen Ertl
20	Kimley-Horn, John Canning
21	Madeleine McGinley
21	Michael W. Klemens
23	Diana Hird



24	Lynn Rogoff
25	Town of Philipstown Highway Department
26	Claudio Marzollo
27	Richard T. Perricelli
28	Anthony Merante
29	Martha Ferris Kostmayer
30	Paul & Anna Kantor
31	Heidi A. Wendel & Joseph L. Hirsch
32	AKRF
33	Rudolph S. Rauch
34	Irvine D. Flinn
35	Susan Anspach
36	Ronald J. Gainer, P.E., PLLC
37	Sidney Babcock
38	Celia Imrey
39	Adam Hird
40	Mark Tabashnick
41	Glenn & Susan Lowry
42	Lynda Ann Ewen
43	Linda & Jack Weinstein
44	John Mangano
45	Ed Polhemus
46	Kim Conner
47	Town of Philipstown Conservation Board
48	Town of Philipstown Conservation Board – Supplemental Submission
49	Steven Loria
50	Melissa Ricketts

51	Ann Hammond
52	Bettina Utz
53	Bidu Tashjian
54	Bidu Tashjian
55	David J. North
56	Anita Chester
57	Julia Famularo
58	Irene O'Garden
59	Rick Wake
60	Jon Kiphart
61	Dean Lentz
62	Concerned Citizens of Philipstown
63	Damian W. McDonald
64	Diana Rosato
65	Celia Imrey
66	Richard Butensky
67	Dave Merandy
68	Lynn Rogoff
69	David Hunter
70	Putnam County Dept. of Health

Planning Board Minutes of 6/20/19 Public Hearing

Stenographer's Transcript of 6/20/19 Public Hearing

***COMMENTS RECEIVED AFTER 7/8/2019 DEADLINE***	
71	Concerned Citizens of Philipstown – Rec'd 7/11/19
72	Concerned Citizens of Philipstown – Rec'd 7/11/19

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Recipient: Anthony Merante, Tara Percaciollo

Letter: Greetings,

Ask the Phillipstown Planning Board to vote NO to the Hudson Highlands Reserve application

# Comments

Name	Location	Date	Comment
Philipstown Concerned Citizens	Cold Spring, NY	2019-07-08	"I want to protect the natural beauty of our region and help prevent over-development"
tristan culbert	Livingston, NY	2019-07-08	"Glass Berry Commons was already too much"
Bonnie Stein	NY, NY	2019-07-08	"I signing because this plan is outrageous and created completely without merit."
Susan Hyatt	Ossining, NY	2019-07-08	"There is so much wrong with this proposal that has not been addressed. It is preposterous that this could even be considered as a Conservation Development. Please do the right thing!"
Davis McCallum	Brooklyn, NY	2019-07-08	"I'm concerned about traffic traffic on EMRS, and disturbance to the wildlife near Horton Road."
Catherine Serreau Thompson	GARRISON, NY	2019-07-08	"To the Philipstown Planning Board, Madam, Sir,By signing the enclosed petition, Along with the Hudson Highland Landtrust and Putnam Highland Audubon Society, I am voicing my deep concern over the environmental impact the HHR project or any subsequent one of the sort is certain to have. Allowing this project implementation is in complete contradiction with the protection of the environment Phillipstown advocates, one of the reasons why I moved here in the first place. We do not have another chance to ascertain and affirm our resolution to keep our town and it's wild life free from the disruption such a project will inflict, and thereby discourage any other such development. I respectfully urge our Planning Board members and our Town Supervisor to reject the HHR application.Catherine Serreau ThompsonGarrison, NY"
Maureen McGrath	Cold Spring, NY	2019-07-08	"The proposed development sounds wrong on so many issues from traffic to wildlife to the number of horses but most of all it sets a horrible precedent. Please do not allow it to go through."
wickham Boyle	New York, NY	2019-07-08	"This is a terrible idea and a bad precedent to set. NO NO NO"
Malachy Cleary	Cold Spring, NY	2019-07-08	"It's hugely oversized and will negatively impact the Highlands/ Fahnestock corridor"
Lillian Rosengarten	Cold Spring, NY	2019-07-08	"This is a terrible, unthought through project. I urge you to reject it.It will destroy our area for so many reasons."
Sidney Babcock	Garrison, NY	2019-07-08	"A terrible project that is not thought out. Please reject this project. This is a crucial moment in trying to reverse climate change and we are all responsible. We must act locally and we must act now!"
Richard Butensky	NY, NY	2019-07-09	"I have many concerns about the size and scope of this project: the number of horses (and the amount of waste), the size of the stables and ring (likened to the size of a Walmart superstore!), the entrance from Route 9 (not endorsed by the DOT), the number of houses, the aquifer, the conserved land (and its continuity)."

<b>Name</b>	<b>Location</b>	<b>Date</b>	<b>Comment</b>
Richard Butensky	NY, NY	2019-07-09	"the last statement was from Judy Cohen."
Romulo Ramos	Irvington, NY	2019-07-09	"As a frequent user of the Breakneck Ridge Trails, I am concerned for the disruption to the ecosystem and the natural cycles of the wildlife population that a development of this scale in such close proximity will cause. The inconclusive impact studies will expose the reviewing agencies to the costly lawsuits which those of us concerned with the environmental impact will make sure are filed and funded."
Christine Armstrong	Meriden, CT	2019-07-09	"Beautiful old homes in a naturally beautiful area are rare can never be replaced. Destroying the treasure you have for near-term profit is short-sighted and a mistake"
Bettina Utz	Cold Spring, NY	2019-07-09	"Please do not create precedent for other developments in the area. This project is a bad idea for so many reasons. Apart from the environmental impact, 25 homes could potentially house 50+ kids. Our school cannot handle such an increase in students. Even though they keep repeating it, the developer cannot guarantee weekend use only. Houses are being re-sold and use is changing. This is just one of many short sighted and empty promises that the developer is making about this project."
Carol Gray	Cold Spring, NY	2019-07-09	"I am concerned about the impact on our beautiful mountain."
john caughey	burwood 3125, Australia	2019-07-10	"Obvious!!"
Julia Zern	Cold Spring, NY	2019-07-10	"I'm concerned about the environmental impact and the well-being of the horses, this development is not sustainable"
andrea latvis	cold spring, NY	2019-07-10	"The traffic implications and possible pollutants to well water for those of us down the mountain."
Suzanne Ketchum	Pleasantville, NY	2019-07-10	"I'm signing because we need more open spaces!!!"
Jane Marcy	Garrison, NY	2019-07-10	"This would be a terrible precedent for usage under the Open Space Development code - the wildlife and environmental impact will be too great to accept as outlined in the attached letter to the Planning Board. We count on you to protect our lands and resources."
Matthew Chase	Cold Spring, NY	2019-07-10	"Natural spaces are what make this town and region special."
Lara Shihab-Eldin	Wappingers Falls, NY	2019-07-10	"This project will have too many environmental costs, and will negatively impact local residents in my community."
Michael Ritell	Mahopac, US	2019-07-11	"No more new construction, this area is over crowded and we need to retain as much nature as possible."

**change.org**

Recipient: Anthony Merante, Tara Percaciollo

Letter: Greetings,

Ask the Phillipstown Planning Board to vote NO to the Hudson Highlands Reserve application

# Signatures

<b>Name</b>	<b>Location</b>	<b>Date</b>
Celia Imrey	Cold Spring, NY	2019-06-21
John Clark	Cold Spring, US	2019-07-07
Satoshi Yano	Cold Spring, NY	2019-07-08
Tristan Culbert	Cold Spring, US	2019-07-08
Karen Sachs	New York, US	2019-07-08
Tom Imrey	Van Nuys, US	2019-07-08
Adrian Ellis	Nutley, US	2019-07-08
David Hunter	Cold Spring, US	2019-07-08
Jonathan Hull	Cold Spring, US	2019-07-08
Saul Reiser	Nutley, US	2019-07-08
Nina Cucchiari	Cold Spring, US	2019-07-08
Sara Yano	Cold Spring, NY	2019-07-08
Robert Spurr	Cambridge, US	2019-07-08
Jean claude Temo	Washington, MD	2019-07-08
Jonivan Klajda	Pima, US	2019-07-08
Debra Nairn	Cold spring, US	2019-07-08
Charles McDuffee	Cold Spring, US	2019-07-08
Bonnie Stein	NY, NY	2019-07-08
Jeremy Drysdale	Cold Spring, US	2019-07-08
Paul Tschinkel	Cold Spring, US	2019-07-08



<b>Name</b>	<b>Location</b>	<b>Date</b>
Blank Blank	Norcross, US	2019-07-08
Nina Jody	New York, NY	2019-07-08
Florence Clutch	New York, US	2019-07-08
Pamela Doan	Cold Spring, US	2019-07-08
Pamela Cook	Cold Spring, US	2019-07-08
Katherine Drysdale	Cold Spring, US	2019-07-08
Erik Brown	Cold Spring, US	2019-07-08
Krystal Ford	Philipstown, NY	2019-07-08
Jennie Sexton	Cold Spring, US	2019-07-08
Amy Goldberg	Cold Spring, US	2019-07-08
Trieu Dang	Houston, US	2019-07-08
Jose Rodriguez	Cold Spring, US	2019-07-08
Harley Bryant	Alachua, US	2019-07-08
Melissa Ricketts	Cold Spring, NY	2019-07-08
timothy maxwell	Cold Spring, NY	2019-07-08
Kelly House	Cold Spring, NY	2019-07-08
Melinda Moyer	Cold Spring, US	2019-07-08
Bidu Tashjian	Cold Spring, NY	2019-07-08
Susan Hyatt	Ossining, NY	2019-07-08
Bettina Utz	Cold spring, US	2019-07-08
Dean Lentz	Cold Spring, US	2019-07-08
Davis McCallum	Brooklyn, NY	2019-07-08

<b>Name</b>	<b>Location</b>	<b>Date</b>
Michael Moyer	Philipstown, US	2019-07-08
Keith Sexton	Cold Spring, US	2019-07-08
David Limburg	Cold Spring, NY	2019-07-08
VIRGINIA SOLE-SMITH	Cold Spring, US	2019-07-08
Michael Perricone	Cold Spring, US	2019-07-08
Gaston Alonso	Cold Spring, US	2019-07-08
LJ Langley	Cold Spring, NY	2019-07-08
Edward Kreps	Cold spring, US	2019-07-08
Margaret Yonco-Haines	Garrison, NY	2019-07-08
ANN HAMMOND	Cold Spring, NY	2019-07-08
Jax Taylor	Cold Spring, NY	2019-07-08
James Nicholas	Cold Spring, NY	2019-07-08
Livea Byrne	Cold Spring, US	2019-07-08
Angie Gambuzza	Lindenhurst, NY	2019-07-08
Catherine Serreau Thompson	Irvington, NY	2019-07-08
MICHAEL CASALE	Cold Spring, US	2019-07-08
Nanci McDonald	Cold Spring, US	2019-07-08
Felicity Erwin	Cold Spring, US	2019-07-08
Angela Jones	New York, NY	2019-07-08
suzanne murray	philipstown, US	2019-07-08
charles duffner	Piscataway, NJ	2019-07-08
Chris Porter	Cuyahoga Falls, US	2019-07-08

<b>Name</b>	<b>Location</b>	<b>Date</b>
Steven Loria	Little Falls, US	2019-07-08
Ashley Rauch	Totowa, US	2019-07-08
BARBARA COX	Nutley, US	2019-07-08
Maureen McGrath	Cold Spring, NY	2019-07-08
Claudia Dizenzo	Cold Spring, US	2019-07-08
Jane Hanley	Cold Spring, US	2019-07-08
Sarazina Stein	New York, US	2019-07-08
JAY MUELLER	New York, US	2019-07-08
Catherine Lim	Newark, US	2019-07-08
Christian Ramos	Dows, US	2019-07-08
Anthony Ventura	Petaluma, US	2019-07-08
Cameron Emerson	Mandeville, US	2019-07-08
John Giametta	Cold Spring, US	2019-07-08
Robert Deutsch	New York, US	2019-07-08
wickham Boyle	New York, NY	2019-07-08
Richard Butensky	Cold Spring, US	2019-07-08
Lisa Quartin	Cold Spring, US	2019-07-08
Adam Kozicharow	Cold Spring, US	2019-07-08
Ronan Coleman	Cold Spring, US	2019-07-08
Chris Mathers	Brooklyn, US	2019-07-08
DAWN YOUNG	Lewes, NY	2019-07-08
Diane Spurr	Cambridge, US	2019-07-08

<b>Name</b>	<b>Location</b>	<b>Date</b>
Brayden Santini	Wylie, US	2019-07-08
Laura Nathanson	Cold Spring, US	2019-07-08
Ryan Murphy	Cold Spring, US	2019-07-08
Nancy Berner	Brooklyn, NY	2019-07-08
Diana Hird	Cold Spring, NY	2019-07-08
Diana Cruz-Hasler	Cold Spring, US	2019-07-08
Pamela Coumans	Cold spring, US	2019-07-08
Charles Burleigh	Garrison, US	2019-07-08
Madeline Rae	Little Falls, US	2019-07-08
Jayson Allen	Jacksonville, US	2019-07-08
Doug Starn	Putnam Valley, US	2019-07-08
Isaac Delgadillo	San Carlos, US	2019-07-08
Danny Tran	Honolulu, US	2019-07-08
Richard Wake	Cold Spring, US	2019-07-08
Malachy Cleary	Cold Spring, NY	2019-07-08
Lillian Rosengarten	Cold Spring, NY	2019-07-08
Jennifer Gilleo	Cold spring, US	2019-07-08
Todd Giudice	Cold Spring, NY	2019-07-08
Nils Walter	Garrison, US	2019-07-08
Kalista Parrish	cold spring, US	2019-07-08
sonia ryzy-ryski	cold spring, NY	2019-07-08
alexis lowry	Cold Spring, US	2019-07-08

<b>Name</b>	<b>Location</b>	<b>Date</b>
Edward D Bushek	Fishkill, US	2019-07-08
Allison Sassano	Cold spring, US	2019-07-08
sidney babcock	Garrison, US	2019-07-08
Susan Lowry	Philipstown ny, US	2019-07-08
Vreni Hommes	Cold Spring, NY	2019-07-08
Arely Gutierrez	Broomfield, CO	2019-07-08
Roy Leonard	Astoria, US	2019-07-08
Nicholas Lowry	cold spring, US	2019-07-08
Joe Dizney	Cold Spring, US	2019-07-08
Lara Voloto	cold spring, US	2019-07-08
shari alexander	Cold Spring, US	2019-07-08
Dayna Resi	Willimantic, CT	2019-07-08
Lyn Horst	Cold Spring, US	2019-07-08
David Marzollo	Formia, Italy	2019-07-08
Julia Kisla	Cold Spring, NY	2019-07-08
Damian McDonald	Cold Spring, US	2019-07-08
Eduardo Suastegui	Vallejo, US	2019-07-08
Rosie Gutierrez	Brooklyn, US	2019-07-09
Emanuel Valencia	Santa María, US	2019-07-09
Suzie Gilbert	East Hampton, US	2019-07-09
Kimberly Sevilla	Brooklyn, NY	2019-07-09
Peter Weed	Garrison, US	2019-07-09

<b>Name</b>	<b>Location</b>	<b>Date</b>
Sebastian Ramos-Roux	Hastings On Hudson, US	2019-07-09
Emily Duncan	Cold Spring, NY	2019-07-09
michael strauss	Briarcliff Manor, US	2019-07-09
Wendy Chaix	Fairfield, US	2019-07-09
Joi Boyd	Richmond, US	2019-07-09
Christine Bokhour	Cold spring, US	2019-07-09
Carl Byrne	Cold Spring, US	2019-07-09
Roberto Muller	Cold Spring, US	2019-07-09
Romulo Ramos	Irvington, NY	2019-07-09
Elias Andersen	Westminster, US	2019-07-09
Ray Torres	Wendell, US	2019-07-09
Andera Root	Federal Way, US	2019-07-09
Grace Morrin	Eugene, US	2019-07-09
Barbara Post	Brooklyn, US	2019-07-09
annabelle brunet	France	2019-07-09
Brandon Juby	Cold Spring, US	2019-07-09
Shawna Chandler	Cold Spring, US	2019-07-09
Ann Borthwick	Philipstown, US	2019-07-09
Kathie Scanlon	Philipstown, US	2019-07-09
Amanda Walshjamin	Fishkill, US	2019-07-09
Tamara Hayward Benjamin	Totowa, US	2019-07-09
Katie Bissinger	Cold Spring, NY	2019-07-09

<b>Name</b>	<b>Location</b>	<b>Date</b>
Erin Detrick	Cold Spring, US	2019-07-09
Brenda Tomenga	Houston, US	2019-07-09
David Boyd	Cold Spring, US	2019-07-09
Quinn Chandler	Cold Spring, US	2019-07-09
Eliza Matthews	Cold spring, US	2019-07-09
Michael Glover	Cold Spring, US	2019-07-09
Obert Wood	Garrison, US	2019-07-09
Karen WHITE	Union City, US	2019-07-09
Holly Mackin	Cold Spring, NY	2019-07-09
Jonathan Bennett	Cold Spring, US	2019-07-09
Yamilet Salazar	Jackson, US	2019-07-09
Jacob Haelen	Garrison, US	2019-07-09
John Quigley	Brooklyn, US	2019-07-09
Christine Armstrong	Meriden, CT	2019-07-09
Anthony Phillips	Park Ridge, US	2019-07-09
Nancy Lara	Tampa, US	2019-07-09
Number One	Marengo, US	2019-07-09
Myesha Gunn	Montgomery, US	2019-07-09
Pamela Wake	New York, US	2019-07-09
Ana Silverlinck	New York, US	2019-07-09
James Sizemore	Ixelles, Belgium	2019-07-09
Mauro Huaman	Miami, US	2019-07-09

<b>Name</b>	<b>Location</b>	<b>Date</b>
Camille Hanson	Minneapolis, MN	2019-07-09
Liz Mariah	Scranton, US	2019-07-09
Miles Cady	North Bend, US	2019-07-09
Alex P	Gaithersburg, US	2019-07-09
Ryan Bobb-Green	Miami Gardens, US	2019-07-09
Tyrone Napier	US	2019-07-09
Caitlin Chadwick	Cold Spring, US	2019-07-09
brian carman	Plymouth, US	2019-07-09
Ibzan Alvarado	South Elgin, US	2019-07-09
Matthew Ball	Pensacola, US	2019-07-09
Nancy Apollonio	Cold Spring, US	2019-07-09
Nate Berner	Philipstown, US	2019-07-09
George Lansbury	Garrison, US	2019-07-09
Maya Dollarhide	Cold Spring, US	2019-07-09
Emmanuel Boursin	Cold Spring, US	2019-07-09
Carolyn Llewellyn	Cold Spring, NY	2019-07-09
Ruben Sanchez	Vancouver, US	2019-07-09
Steve Reid	Philadelphia, US	2019-07-09
mayra ortiz	Lockhart, US	2019-07-09
Kris Thompson	Cold Spring, US	2019-07-09
Clayton Wilson	Huntersville, US	2019-07-09
Sebastien Berner	Cold Spring, US	2019-07-09



<b>Name</b>	<b>Location</b>	<b>Date</b>
Joelle Van Sickle	Cold Spring, US	2019-07-09
Andrea Connor Hudson	cold spring, NY	2019-07-09
Emilie Berner	Secaucus, US	2019-07-09
Karen Kapoor	Cold spring, US	2019-07-09
Virginia Buechele	Fishkill, US	2019-07-09
Carol Gray	Cold Spring, NY	2019-07-09
Greg Pehrson	Cold Spring, US	2019-07-09
Thomas Berner	Brooklyn, US	2019-07-09
Carlos McCain	Selma, US	2019-07-09
Charitie Kastner	Raleigh, US	2019-07-09
Maria Borroto	Miami, US	2019-07-09
Pedro Reyes	Walnut, US	2019-07-09
Sarah Gurland	Cold Spring, NY	2019-07-09
leonora burton	Brooklyn, US	2019-07-09
Rachel Emig	COLD SPRING, US	2019-07-09
Kathleen McLane	Nutley, US	2019-07-09
Makiko Parsons	Cold Spring, NY	2019-07-09
Kathleen MacIntyre	Cold Spring, NY	2019-07-09
Alex Dubroff	East Aurora, US	2019-07-09
Briana Carrillo	Chula Vista, US	2019-07-10
Jimena Sosa	Yonkers, US	2019-07-10
Sarah Hedeem	Rosemount, US	2019-07-10

<b>Name</b>	<b>Location</b>	<b>Date</b>
Cody Swanger	Raleigh, US	2019-07-10
Daniel Paladines	League City, US	2019-07-10
Shinique Alexander	Brooklyn, US	2019-07-10
Nick Aiello	Waunakee, US	2019-07-10
Jaelynnn Crawford	Chicago, US	2019-07-10
sammy smith	Cold spring, NY	2019-07-10
Walter Chadwick	Bronx, NY	2019-07-10
Shannon Herman	Stormville, NY	2019-07-10
Heidi Bender	Secaucus, NY	2019-07-10
Lisa Sabin	Cold Spring, NY	2019-07-10
Samantha Fuster	Scarsdale, US	2019-07-10
john caughey	burwood 3125, Australia	2019-07-10
Debora Ruiz	Bronx, US	2019-07-10
Benjamin Beaven	Champaign, US	2019-07-10
Jessica Burnett	inman, US	2019-07-10
Dakota Quagon	Milwaukee, US	2019-07-10
Matt Umland	Spokane, US	2019-07-10
Pomaika'i Nakamoto	Makawao, US	2019-07-10
Julia Zern	Cold Spring, NY	2019-07-10
Esmeralda Sanchez	Saugus, US	2019-07-10
Herve Bertrand	Fremont, US	2019-07-10
Melissa L Ptacek	Cold Spring, NY	2019-07-10

<b>Name</b>	<b>Location</b>	<b>Date</b>
Melissa Carroll	Cold Spring, US	2019-07-10
Russell Ritell	Cold spring, US	2019-07-10
andrea latvis	cold spring, NY	2019-07-10
Meghan Spiro	Clifton, US	2019-07-10
Suzanne Ketchum	Pleasantville, NY	2019-07-10
Stephen VanderMerwe	Nelsonville, US	2019-07-10
Serge Young	Beacon, US	2019-07-10
Susan Gin	Carmel, NY	2019-07-10
William McKenna	Oliveira, Brazil	2019-07-10
Janelle Weaver	New York, US	2019-07-10
Emaleigh Ickler	Camp Hill, US	2019-07-10
Michael Scicluna	Cold Spring, US	2019-07-10
Qw Qw	Newark, US	2019-07-10
Johe#Loyola1985 Guerrero	Abingdon, US	2019-07-10
Essence Lawrence	Detroit, US	2019-07-10
Richie Casey	Venice, US	2019-07-10
Larry Guzman	Wappingers Falls, NY	2019-07-10
Ray Roy	cortlandt manor, NY	2019-07-10
Bethany Granoff	Beacon, US	2019-07-10
Tim O'CONNELL	Yorktown Heights, US	2019-07-10
William Johnston	Boston, US	2019-07-10
Bryce Brown	Lincoln, US	2019-07-10

<b>Name</b>	<b>Location</b>	<b>Date</b>
Benjamin Barton	Mancheser, US	2019-07-10
Sophia Lee	Overland Park, US	2019-07-10
Conner Robertson	Redmonf, US	2019-07-10
Jonathan Hiles	New York, US	2019-07-10
Maria Oliva	Smithville, US	2019-07-10
Sarah Baune	Minneapolis, MN	2019-07-10
Nikolas Garcia	Las Cruces, US	2019-07-10
Lane Gregory	Butler, US	2019-07-10
Kerri Iuele RN	Stormville, NY	2019-07-10
Alexandra Winsby	Wappingers Falls, NY	2019-07-10
Charles Rohlfs	Potsdam, US	2019-07-10
Brian Maurice	South Salem, US	2019-07-10
Dominic Ferraro	Erie, US	2019-07-10
Jayquan West	New york, US	2019-07-10
Aaron Kwong	Stoneham, US	2019-07-10
Richard Seeley	St.petersburg, US	2019-07-10
Addison Lindsey	Troy, US	2019-07-10
Mykelle Walton	Savannah, US	2019-07-10
Robenson Louisius	North Miami, US	2019-07-10
Jill Ferrer	Valhalla, US	2019-07-10
Kaleimomi Cazimero	Waipahu, HI	2019-07-10
Meredith Byrd	Myrtle Beach, US	2019-07-10

<b>Name</b>	<b>Location</b>	<b>Date</b>
Shelle Kirk	Magnolia, US	2019-07-10
Natalya Aikens	Pleasantville, US	2019-07-10
Stephen D'Angelo	Poughkeepsie, US	2019-07-10
Lisa Mocerino	Mahopac, US	2019-07-10
Jane Marcy	Garrison, NY	2019-07-10
Daniel Visco	Miami, US	2019-07-10
Sasha Prendes	Brooklyn, US	2019-07-10
Shumei Zhang	Union City, US	2019-07-10
Brianna Barbera	Aurora, CO	2019-07-10
ryan landis	Canoga Park, US	2019-07-10
Matthew Chase	Cold Spring, NY	2019-07-10
Daniel Gonzalez	Mission, US	2019-07-10
Joshua Heldwein	Parrish, US	2019-07-10
Richard Clark	Cold Spring, US	2019-07-10
Toby Dunne	Beacon, US	2019-07-10
Eileen Denehy	Brooklyn, US	2019-07-10
Matt Homberg	Philipstown, US	2019-07-10
Juliet Conlon	Putnam valley, US	2019-07-10
Amber Marino	Cold Spring, US	2019-07-10
Richard Grimaldi	Croton-on-Hudson, NY	2019-07-10
Abigail Taylor	Brooklyn, NY	2019-07-10
Carolyn Schulhoff	Ancramdale, NY	2019-07-10

<b>Name</b>	<b>Location</b>	<b>Date</b>
Danielle D'Angelo	Carmel, US	2019-07-10
Gina Miceli	Carmel, NY	2019-07-10
ChangeO FPower	FreemansNames, US	2019-07-10
Jayke Youell	New Albany, US	2019-07-10
Aileen Lopez	Pasadena, US	2019-07-10
Whitney Kuhn	New York, US	2019-07-10
Jeff Glondano	Bronx, US	2019-07-10
Destiny Torres	Albrightsville, US	2019-07-10
Tom Griffin	Andrews, SC	2019-07-10
Gail Purcell	Morrison, US	2019-07-10
Tom Jagemann	Yorktown Heights, US	2019-07-10
jackie wlodarczak	Cold Spring, NY	2019-07-10
Lara Shihab-Eldin	Wappingers Falls, NY	2019-07-10
Mel Laytner	Nelsonville, US	2019-07-10
Doris Nieves	Garrison, US	2019-07-10
Michael Frimmer	Stockholm, Sweden	2019-07-10
Karen O'Reilly	Spring, TX	2019-07-10
Bo Bell	Cold Spring, NY	2019-07-10
Cassie Schaaf	Poughkeepsie, NY	2019-07-10
Diana Bank	Forest Hills, US	2019-07-10
Denny Curtis	Newburgh, US	2019-07-10
Rodney W Dow	Garrison, NY	2019-07-10

<b>Name</b>	<b>Location</b>	<b>Date</b>
Vicky Lowry	Carmel, US	2019-07-10
Patricia Tetlow	Croton on Hudson, US	2019-07-11
Vivian Nikolatos	Pawling, US	2019-07-11
Duane Fibel jr	Myrtle Beach, US	2019-07-11
Betty Hammond	Bronx, US	2019-07-11
erika kopp	Oak Creek, US	2019-07-11
Chris Bands	Okc, US	2019-07-11
Samantha Rundle	Poughkeepsie, US	2019-07-11
David Herman	Cold Spring, US	2019-07-11
Liz Wassaffs	Brooklyn, US	2019-07-11
Tabitha Mass	Holbrook, US	2019-07-11
Michelle Buccione	Fishkill, US	2019-07-11
Barton Chew	Cold Spring, NY	2019-07-11
Michael Ritell	Mahopac, US	2019-07-11
Massimo Cangialosi	White Plains, US	2019-07-11
Joel Lizardo	Queens village, US	2019-07-11
Virginia Kinzey	New york, US	2019-07-11
michael vigilio	New York, US	2019-07-11
Karen OBrien	Enfield, US	2019-07-11
John Apicelli	Peekskill, US	2019-07-11
Lesley McKenzie	San Diego, US	2019-07-11
Azyria Johnson	Florence, US	2019-07-11

<b>Name</b>	<b>Location</b>	<b>Date</b>
Victor Muniz	Conway, US	2019-07-11
Maya Atassi	Oak Brook, US	2019-07-11
Darryl Walker	North Las Vegas, US	2019-07-11
Heather Ryan	Hitchcock, US	2019-07-11
Audreyanna DurbinMendoza	Tucson, US	2019-07-11
lucy campbell	blythewood, US	2019-07-11
Karyn Berger	Katonah, US	2019-07-11
Dina McGowan	Hopewell, US	2019-07-11
David Dickinson	Cold Spring, US	2019-07-11
Rebekah Azzarelli	Beacon, US	2019-07-11
Shari Berkowitz	Peekskill, US	2019-07-11
Lee Ann Pomplas	Mountain View, US	2019-07-11
Cesar Aguilar	Las Cruces, US	2019-07-11
Denyse Countryman	Englewood, US	2019-07-11
Sara Helmick	Oak Hill, US	2019-07-11
Jeremy Hall	Chaumont, US	2019-07-11
Brendan Coyle	Ketchum, US	2019-07-11
Vaunna Gower	Lithonia, US	2019-07-11
Pamila Stacy	Pikeville, US	2019-07-11
Katherine MacInnes	Garrison, US	2019-07-11







**PUTNAM COUNTY DEPARTMENT OF HEALTH**

1 Geneva Road, Brewster, NY 10509 ☐ 845-808-1390

[www.putnamcountyny.gov/health](http://www.putnamcountyny.gov/health)

A PHAB-ACCREDITED HEALTH DEPARTMENT

**MaryEllen Odell**  
COUNTY EXECUTIVE

**Michael J. Nesheiwat, MD**  
INTERIM COMMISSIONER OF HEALTH

June 17, 2019

Anthony Merante, Chairman  
Philipstown Planning Board  
Town Hall  
238 Main Street  
Cold Spring, NY 10516

Re: Hudson Highlands DEIS

Dear Mr. Merante:

This Department has received and reviewed the submitted draft environmental impact statement (DEIS) for the above referenced project and the following comments are offered.

1. The maximum allowable slope in a proposed subsurface sewage treatment system (SSTS) area is twenty (20) percent. Portions of the proposed reserve common SSTS area exceed 20 percent which is not permissible.
2. In accordance with PCDPH Bulletin RS-21, the proposed 25 lot realty subdivision will require the drilling of a minimum of three (3) test wells to ascertain groundwater availability for potable use. All test wells are to be tested for water quantity and quality.

Should you have any questions concerning the above, please contact this office.

Respectfully,

A handwritten signature in blue ink, appearing to read "Michael J. Buzinski".

Michael J. Buzinski, P.E.  
Director of Engineering

**Response 3A.19**

MJB: cml

July 6, 2019

Town of Philipstown Planning Board  
238 Main Street  
P.O. Box 155  
Cold Spring, NY 10516

Re: Hudson Highlands Reserve

Dear Chairman Merante and Members of the Philipstown Planning Board,

I am writing again to underscore my concerns regarding the conservation subdivision development proposal known as the Hudson Highlands Reserve.

I have been following progress of this proposal from the very beginning and have previously detailed my concerns to the board in writing (in a letter dated November 17<sup>th</sup>, 2014) and in person (last at the January 18<sup>th</sup>, 2018 public hearing) regarding vehicular access points to the subdivision, waste management from the proposed equestrian center, and whether this proposal meets the requirements laid out in the Philipstown Comprehensive Plan and zoning laws to be granted conservation subdivision status.

I was unfortunately unable to attend the most recent public hearing held on June 20<sup>th</sup>, but having watched the video recording of the hearing I was alarmed by much of the public commentary on the proposal and urge the board not to give this proposal in its current form a green light to proceed. There are too many significant concerns still unaddressed by the applicant in what will be a precedent setting development for our community.

I have signed on to a community petition that has been circulated by concerned neighbors and succinctly outlines concerns my family shares about the proposed development as follows:

Response  
3B.34,  
3B.54,  
3B.70

*-The findings of the EIS make it clear the current proposal will disrupt wildlife to such an extent the aims of the conservation easement cannot be met, especially with respect to the proposed fragmentation of the conserved areas.*

Response  
2.51,  
3B.42

*-The measure of current wildlife populations have not yet been sufficiently established to create a baseline.*

Response  
3A.4

*-The measure of the negative effects of the horse population and its maintenance with respect to wildlife, waterways, traffic, noise have not been sufficiently established.*

Response  
3D.11  
3D.5

*-The protection of views of nature from Breakneck Ridge, New York State's most popular hiking trail have not been established.*

Response 2.85

*-Alternate access into the development if the DOT does not approve Route 9 access has not been established.*

**Response 2.93** -Rules and accountability for the HHR management such as pollutants on site, governance, etc,.. have not been sufficiently established.

**Response 2.51** -Accountability, measuring standards, monitoring terms and frequency have not been sufficiently established for the conservation easement, the equestrian facility, or the housing development.

-Professional references and credentials for the developer and the architect for a project of this size and complexity have not been established.

*In addition, we especially support the detailed concerns of the easement itself, listed in the June 18, 2019 letter from the HHLT to the Philipstown Planning Board. See [https://www.hhlt.org/in-content/uploads/2019/06/HHLT\\_-\\_Comments\\_to\\_Philipstown\\_Plan\\_Board.pdf](https://www.hhlt.org/in-content/uploads/2019/06/HHLT_-_Comments_to_Philipstown_Plan_Board.pdf)*

*We recommend the Planning Board consider requiring the applicant to obtain preliminary approval from the NYDOT for the new road access onto Route 9, and requiring the applicant to obtain confirmed participation of an independent agency to monitor the proposed easement prior to further consideration of this application.*

**Response 2.90** I was especially surprised by the apparent inaction of the developer relative to communications from the NYDOT. Having assured residents of existing roads adjacent to the proposed development site that their roads and homes would not be subjected to additional traffic from the development, this seems like a rather large oversight. At the January 18, 2018 meeting when I raised concerns about access from Route 9, Mr. Glenn Watson specifically referenced the traffic studies in the Environmental Assessment Form and stated the it "...looks like it doesn't warrant anything further than a standard intersection." I still question this assumption, especially when considering additional commercial traffic created by management of the proposed equestrian facility, and strongly feel that new access from Route 9 is absolutely necessary and should be addressed with NYDOT immediately.

Thank you for hearing my concerns.

Sincerely,  
David Hunter  
47 Horton Road  
Cold Spring, NY 10516

Philipstown Planning Board, Philipstown, NY 10516

**Chairman**

Anthony Merante

**Board Members**

Peter Lewis

Kim Conner

Neal Zuckerman

Dennis Gagnon

Dave Hardy

Neal Tomann

**Board Secretary**

Linda Valentino

Wednesday, February 14, 2018

Dear Planning Board,

Good evening esteemed planning board members and concerned citizens of Cold Spring.

I was invited to attend the planning board for I am the owner of 7 acres that border the Hudson Highland Reserve (HHR) proposal. I plan to speak at the February 15<sup>th</sup> Planning Board Public Meeting. I am sending this email letter to be added into the record. I was unable to attend until tonight, but we did attend the Hudson Highland Land Trust (HHLT) education Forum on the Open Space Index and Conservation Subdivisions. Ms. Smith, speaking for the HHLT, brought to light the regulations for the livestock and the recreation proposal for this subdivision are not promulgated in the code.

My family has owned this land and home since 1981 – 37 years. When we first bought this land it was zoned one acre zoning. With the Philipstown comprehensive plan of 2007- 2009, the zoning for the area went from one to three acre zoning and then to 5 acre draconian zoning. Thus subdividing, at all, is not possible any longer for our family.

In general, my neighbors and I have lived contiguously to each on the open space side of the proposed parcel without fences or walls dividing our property for these four decades.

The countless species of animals live in what is now deemed the open space conservation area of this HHR parcel. They often walk across my and my neighbors' property to the eastern neighbor's pond to drink water and back to their habitat where they live and nest. This includes foxes, coyotes, deer, rabbits, turkeys and amphibians of all variety.

They are free to walk across the open space and our property without impediment.

My concern this evening is to discover the details of the HHR intentions for the livestock and recreations uses of the Open space are and the uses of East Mountain Road South ( EMTS) and East Mountain Road North(EMRN). I studied the online portfolio presentation by the architect for the HHR, for the 40 horse equestrian center. There, I found renderings and language describing the horses and their riders will be freely using forested paths for their recreational pleasure. Thus, I would like to see attention paid to the following livestock and recreations uses:

1. Regarding EMRS-The prior owner, the Lyons family, attempted to create an approved parcel on EMRS. Mr. Lyons informed us that they could not find adequate septic fields after building a road and clearing the land. This parcel with its road to EMRS is now part of the HH Reserve parcel. EMRS is a school bus route.
2. Regarding the Open Space Area- I have noted that on the map, the key code in blue lines indicates there are planned stone walls on the open space conservation area.
3. Regarding EMRN-I have also seen the new but steep egress from HHR onto EMRN built over the last year. This road goes through the entire HHR parcel from N to S. EMRN is a steep, windy, dark, thin road where there are often near accidents caused by the narrowness and steepness of the road. Everyone assumes no one else is on the road.

Response  
3B.50

Response  
2.89

Thus, I appreciate the effort that has gone into this proposal but I am concerned that 40 plus horses will be using EMRN and EMRS for egress from the property. As we know, Route 9 is not appropriate for horses and their riders.

As well, I am apprehensive that we may find ourselves visited by horses and riders up the slopes. Or are the stone walls being erected to keep the horses and rider out of our property? But these stone walls will also keep all the animals that use the open space as their habitat from getting to their source of waters. I have watched the December and January meeting of the planning board online where many neighbors from Horton road addressed their reservations and had their uncertainties addressed.

I pray and trust that the planning board will address our concerns on the open space portion of this HHR property and on EMRS and EMRN.

Thank You,

Lynn Rogoff  
464 East Mountain Road South  
Cold Spring, NY 10516

Response  
3D.1

July 8, 2019

Dave Merandy  
15 Academy Street  
Cold Spring, NY 10516

Philipstown Planning Board  
238 Main St.  
Cold Spring, NY 10516

Re: Hudson Highland Reserve (HHR)

Dear Planning Board Members:

I have attended a few of your meetings when the HHR has been on the agenda, including your last SRO meeting at the Old VFW. I spoke at one of your earlier meetings but feel I was not as straightforward as I should have been. At the time I was hoping the applicant would hear the very real concerns local residents had and make necessary changes or perhaps even withdraw the application. As more eloquent residents have pointed out, he has done neither, but rather it seems he has dug in and doubled down. I'm writing to be absolutely clear, as an adjacent property owner, one who may very well be adversely affected if this project moves forward, that I am adamantly opposed to the HHR as proposed.

Response  
2.18

The intent of the Conservation Subdivision was to preserve open space that "could" otherwise be developed. The intent was not to create a Loop-Hole for a slick developer to cram as many houses as possible on the only developable portion of a property. It wasn't to allow a property owner with a smaller tract of land, where only a few lots could be developed, to purchase adjacent "undevelopable" land, combine it with the original piece and then, using the same original property, cram 10 times as many houses as would have been allowed and call it a Conservation Subdivision. Open space is saved but it was never in danger of being developed in the first place.

You have all spent countless hours working on this application and everything I've stated has been stated before in much more succinct, professional and expert fashion. However, this is a very important decision you will be making. It will definitely set a terrible precedent if approved and I would like to add my name to the growing number of concerned residents and ask you to please deny this application as presently proposed.

Sincerely,

Dave Merandy  
Owner of adjacent property at 39 E. Mtn. Rd. North

**Subject:** Hudson Highlands Reserve DEIS Public Comment

**From:** butelinc <butelinc@gmail.com>

**Date:** 7/8/2019, 11:30 PM

**To:** amerante@philipstown.com, Tara  
<tpercacciolo@philipstown.com>

Dear Charman Merante and Honorable Board Members,

Given that this is a "fragmented" Conservation Subdivision with a 40 horse facility the size of a Walmart Superstore, located on prime conserved land, and given that the fine print still shows an "old road" through the conserved land that horses still have the right to traverse, and given that almost all of the conserved land was already protected by law or economic inaccessibility, there is no way that any reasonable person can conclude that this Conservation Subdivision is conservationally or ecologically preferable to a Standard Subdivision.

Sincerely,

Richard Butensky

407 E Mountain Rd S, Cold Spring, NY 10516

Response  
4.3



**Subject:** Fwd: HHR letter  
**From:** Celia Imrey <celia.imrey@gmail.com>  
**Date:** 7/8/2019, 11:27 PM  
**To:** tpercacciolo@philipstown.com

Dear Tara Percacciolo,  
I emailed this to Anthony Merante earlier today.  
I hope you can include it in the public records.  
Kind regards,  
Celia Imrey

----- Forwarded message -----  
**From:** Celia Imrey <celia.imrey@gmail.com>  
**Date:** Mon, Jul 8, 2019 at 10:31 AM  
**Subject:** HHR letter  
**To:** <amerante@philipstown.com>

Dear Anthony Merante,  
My family dropped off a new letter concerning the HHR to the town hall over the weekend. If it's possible to add the following note, we appreciate it. Please see attached.  
thank you.  
Celia imrey  
62 Horton Road

----- Attachments: -----

190708\_HHR Letter.pdf

88.6 KB

Dear Philipstown Planning Board,

The APPENDIX R Town of Philipstown, Town Code, Chapter 175, Zoning, Article V. Open Space Development that was adopted by the Town Board on May 5, 2011 is an important planning document for the future of our region. The first applicant under this particular code is an application to develop a parcel in Cold Spring to support 25 new homes and 40 horses, the Hudson Highlands Reserve.

Multiple concerns of this application have been made public. We especially support the concerns of the easement itself, listed in the June 18, 2019 letter from the HHLT to the Philipstown Planning Board, attached here.

<https://www.hhlt.org/wp-content/uploads/2019/06/HHLT-Comments-on-HHR-DEIS.pdf>

We urge the Planning Board to reject the HHR application as it stands now for the following reasons:

Response

3B.34, -The findings of the EIS make it clear the current proposal will disrupt wildlife to such an  
3B.54 extent the aims of the conservation easement cannot be met, especially with respect to  
3B.70 the proposed fragmentation of the conserved areas.

Response

2.51, -The measure of current wildlife populations have not yet been sufficiently established  
3B.42 to create a baseline.

Response

3A.4, -The measure of the negative effects of the horse population and its maintenance with  
respect to wildlife, waterways, traffic, noise have not been sufficiently established.

Response

3D.11, -The protection of views of nature from Breakneck Ridge, New York State's most  
3D.5 popular hiking trail have not been established.

Response -Alternate access into the development (if the DOT does not approve Route 9 access)  
2.85 has not been established.

Response

2.93 -Rules and accountability for the HHR management (AIRBNB, pollutants on site, pets,  
governance, etc..) have not been sufficiently established.

Response

2.51 -Accountability, measuring standards, monitoring terms and frequency have not been  
sufficiently established for the easement, the equestrian facility or the housing  
development.

-Professional references and credentials for the developer and the architect for a project  
of this size and complexity have not been established.

Response

2.90 In addition, we recommend the Planning Board consider requiring the applicant to  
obtain preliminary approval from the NYDOT for the new road access onto Route 9, and

requiring the applicant to obtain confirmed participation of an independent agency to monitor the proposed easement prior to further consideration of this application.

We have a few SPECIFIC objections to the application as well:

- 1- CLOVE CREEK MAY ALREADY BE ENDANGERED. Our property is directly downstream along Clove Creek from Glassbury Court, which has a conservation easement. The development was supposed to protect the aquifer and the wildlife. The houses were built successively over several years. Our property directly overlooks Clove Creek. Since construction began at Glassbury Court we have observed a significant drop in the local wildlife. So much so that I contacted the NYS Environmental Protection Agency to inquire if they kept records of fish and other animal populations. The turtles, frogs, spiders, bats, possums, large trout, crayfish, muskrat, and kingfishers seem to have disappeared from what was an abundant wetlands environment. The woods are not filled with the cacophony of songbirds as before. I am not an expert, but specifically the fish population is so dramatically decimated to the naked eye, that I obtained a permit from the Department of Fish to stock Clove Creek with Brown Trout.

Response  
3B.48

What is the standard of care for the Glassbury Court easement? What kinds of measurements were done prior to construction to ascertain the natural environment not just at the site but also downstream (our property)? What are the consequences if it can be proven that wildlife has suffered as a result of this development? Does the HHR have any standards of measurement established that are acceptable to the environmental community? Will the HHR be responsible to measure natural conditions downstream from the pond and creek?

- 2- TRAFFIC AND ACCESS TO THE HHR. I'm suspicious of the way in which the HHR represents access in their plans. The first plans had Horton Road included as a direct access into the HHR property. The legend and toning of information in the proposals was vague and not following basic architectural drawing standards. After multiple phone conversation with Glenn Watson and the architect, they adjusted their plans.

Response  
2.89

It's still not clear to me how this property will function if trucks with feed, horses, equipment, manure are going back and forth right in front of everyone's costly weekend homes all day long, never mind the added car traffic of staff, horse owners going back and forth into the facility. The noise, pollution, and annoyance of these trucks will affect the quality of life for those homes. The preferred access to the proposed equestrian facility is undeniably via Horton Road. The HHR assures us this road will not be used. Is that assurance an integral part of their application? If the application is approved, do they have any recourse to use Horton Road if Route 9 is not available?

If the trucks go along Horton Road instead, there are two problems that I see. The first is that now these trucks will negatively affect the residents of Horton

Road. The trucks will lower our property values and make Horton Road an unlivable place if it has a large, busy commercial facility at its end. The second is the danger I foresee of these trucks and cars. Horton road has a dangerous hairpin turn at the top of a steep incline. In the summer of 2017, there was a serious accident here when a speeding car totaled two cars that were sitting in my driveway. An application from the HHR should have a complete traffic plan in place that is approved prior to any formal approvals from the Planning Board. If Route 9 is not approved, then other means of access should be approved before the application is considered any further.

Sincerely,

A handwritten signature in cursive script, appearing to read "Celia Imrey".

Celia Imrey  
August Culbert, Tristan Culbert  
62 Horton Road  
Cold Spring NY 10516

**Subject:** Fwd: Hudson Highlands Reserve  
**From:** Neal Zuckerman <nzuckerman@philipstown.com>  
**Date:** 7/8/2019, 8:39 PM  
**To:** Tara Percacciolo <tpercacciolo@philipstown.com>

Response 2.72, 2.89, 3A.10, 3B.34

Sent from my iPhone

Begin forwarded message:

**From:** Diana Rosato <diana.rosato@att.net>  
**Date:** July 8, 2019 at 6:47:06 PM EDT  
**To:** "amerante@philipstown.com" <amerante@philipstown.com>, "plewis@philipstown.com" <plewis@philipstown.com>, "kconner@philipstown.com" <kconner@philipstown.com>, "nzuckerman@philipstown.com" <nzuckerman@philipstown.com>, "dgagnon@philipstown.com" <dgagnon@philipstown.com>, "dhardy@philipstown.com" <dhardy@philipstown.com>, "ntomann@philipstown.com" <ntomann@philipstown.com>  
**Subject:** RE: Hudson Highlands Reserve

Dear Chairman Merante and Planning Board Members:

Four years ago my husband and I moved to the Glassbury Court community in Cold Spring from the Town of Yorktown in Westchester County. We are very concerned about the proposed Hudson Highlands Reserve development consisting of 25 large homes and an equestrian center which will be able to accommodate 40 horses. How will this development impact the quality of life to residents of my community as well as to those who currently reside along Horton Road and East Mountain Road North? We have all invested money in our properties because we loved the surrounding areas, the beautiful landscapes and living with nature.

I see a number of problems with the building of this development: the increase in traffic on Route 9, the large trucks carrying materials to build this development up and down the 2 main roadways into the development, the ongoing services to cart out the tons of manure on a regular basis, the unwanted horse odors, the contamination of the pond and creek which are located in the center of this proposed building site. How will this development impact the wildlife and environment? How will it impact the resale value of the surrounding properties?

The members of the Planning Board have a responsibility to the current residents of their community. You are entrusted with representing the residents of our town and making sure that our environment is protected. We ask that you not approve this large building site in its present proposal. It is too large in the present form. I hope that the Planning Board will carefully review all comments provided by residents of this community. The Planning Board must address all concerns and assure us that Philipstown laws, regulations and guidelines will be followed. The developer of the Hudson Highlands Reserve but be held accountable in protecting our natural resources.

Respectfully submitted,

**Diana Rosato**

**3 Black Bird Bay  
Cold Spring, NY 10516  
845-809-5956**

July 8<sup>th</sup>, 2019

460 East Mountain Road North  
Cold Spring, New York 10516

Anthony Merante, Chairman  
Philipstown Planning Board  
238 Main Street  
Cold Spring NY 10516

RE: Hudson Highlands Reserve

Dear Chairman Merante and Honorable Board Members

I am writing to express my concerns regarding the Hudson Highlands Reserve development as it currently stands.

Response  
2.17

As a resident who will be directly impacted, I share the concerns and sentiment expressed so well by the Hudson Highlands Land Trust in their letter to the town planning board dated June 18<sup>th</sup>, 2019. In addition to the many environmental concerns, I would implore the Planning Board to reject the current proposal on the most basic grounds – the disregard for Philipstown’s Comprehensive Plan and the intent of our conservation easements and subdivisions.


As a Planning Board, Philipstown’s residents depend on you to uphold and enforce the Comprehensive Plan and safeguard our community and environment. Moving forward with the plan as it currently stands will set a critical precedent that will fundamentally weaken Philipstown’s ability to enforce the Comprehensive Plan as it was intended as well as manage future developments.

Response  
2.89

As you heard through public comment, there is also the very real life-safety issue associated with ingress and egress traffic to East Mountain Road North and Route 9. The current situation is not ideal, and this intersection is prone to accidents. No approvals should be contemplated without a thorough traffic study and intersection / road engineering review and indicated improvements guaranteed. Entering East Mountain Road North from Route 9 is already difficult, and more so when a car is waiting to exit. Adding large trucks, horse trailers and construction equipment would effectively make this a one-way street when traffic queues up to exit unless improvements are made.

In closing, the HHLT has provided considerable input into actions that can be taken to limit the impact of the HHR project. To date these inputs have been largely ignored. This is yet another reason why approval should not be granted.

Sincerely,



Damian W. McDonald

**Subject:** Re: CHANGE.ORG Petition against the HHR  
**From:** Cold Spring <coldspringproperty@gmail.com>  
**Date:** 7/8/2019, 10:35 PM  
**To:** tpercacciolo@philipstown.com, amerante@philipstown.com

Dear Anthony Merante,

We started a letter to you and your board this morning. Please find the list of signatures attached from the Change.org website as of 10:30 pm. A copy of the letter/petition is attached.

We appreciate your kind attention and concern.

Thank you.

-Concerned Citizens of Cold Spring

On Mon, Jul 8, 2019 at 6:10 PM Cold Spring <coldspringproperty@gmail.com> wrote:

Dear Putnam County news teams,

We Concerned Citizens of Philipstown started a petition this morning. It currently has 120 signatures and is growing by the minute. Link is here:

<http://chnng.it/WhvY5p4P>

We will sent the results at 11 pm tonight to Anthony Merante's email address as well as to Tara Percacciolo, Planning Board Secretary. They are copied here as well.

The deadline for submitting comments is midnight tonight but as we have just started this petition we expect to continue to receive responses and plan to keep the Planning Board appraised.

—Attachments:\_\_\_\_\_

2019.07.08\_

51.5 KB



Change.org\_petition\_signatures\_jobs\_16257092\_  
20190709022108.pdf

---

2019.07.08\_Joint Letter to Planning Board.pdf

9.0 KB

July 8, 2019

Dear Philipstown Planning Board,

The Open Space Development code that was adopted by the Town Board in 2011 is an important planning document for protecting the natural beauty, natural resources and wildlife of our region. The first applicant under this code is the Hudson Highlands Reserve applying for permission to develop 25 new homes and an equestrian facility for 40 horses. We urge the Planning Board to reject the HHR application for the following reasons:

Response

3B.34 -The findings of the EIS make it clear the current proposal will disrupt wildlife to such an extent  
3B.54 the aims of the conservation easement cannot be met, especially with respect to the proposed  
3B.70 fragmentation of the conserved areas.

Response

2.51, -The measure of current wildlife populations have not yet been sufficiently established to create  
3B.42 a baseline.

Response

3A.4 -The measure of the negative effects of the horse population and its maintenance with respect to  
wildlife, waterways, traffic, noise have not been sufficiently established.

Response

3D.11, -The protection of views of nature from Breakneck Ridge, New York State's most popular hiking  
3D.5 trail have not been established.

Response

2.85 -Alternate access into the development if the DOT does not approve Route 9 access has not been  
established.

Response

2.93 -Rules and accountability for the HHR management such as pollutants on site, governance, etc,..  
have not been sufficiently established.

Response

2.51 -Accountability, measuring standards, monitoring terms and frequency have not been sufficiently  
established for the conservation easement, the equestrian facility, or the housing development.

-Professional references and credentials for the developer and the architect for a project of this  
size and complexity have not been established.

Response

2.90 In addition, we especially support the detailed concerns of the easement itself, listed in the June  
18, 2019 letter from the HHLT to the Philipstown Planning Board. See  
<https://www.hhlt.org/wp-content/uploads/2019/06/HHLT-Comments-on-HHR-DEIS.pdf>

We recommend the Planning Board consider requiring the applicant to obtain preliminary approval from the NYDOT for the new road access onto Route 9, and requiring the applicant to obtain confirmed participation of an independent agency to monitor the proposed easement prior to further consideration of this application.

Sincerely,

**Concerned Citizens for Philipstown, NY**

**change.org**

Recipient: **Anthony Merante, Tara Percaciollo**

Letter: **Greetings,**

**Ask the Phillipstown Planning Board to vote NO to the Hudson Highlands Reserve application**

# Signatures

<b>Name</b>	<b>Location</b>	<b>Date</b>
Celia Imrey	Cold Spring, NY	2019-06-21
John Clark	Cold Spring, US	2019-07-07
Satoshi Yano	Cold Spring, NY	2019-07-08
Tristan Culbert	Cold Spring, US	2019-07-08
Karen Sachs	New York, US	2019-07-08
Tom Imrey	Van Nuys, US	2019-07-08
Adrian Ellis	Nutley, US	2019-07-08
David Hunter	Cold Spring, US	2019-07-08
Jonathan Hull	Cold Spring, US	2019-07-08
Saul Reiser	Nutley, US	2019-07-08
Nina Cucchiari	Cold Spring, US	2019-07-08
Sara Yano	Cold Spring, NY	2019-07-08
Robert Spurr	Cambridge, US	2019-07-08
Jean claude Temo	Washington, MD	2019-07-08
Jonivan Klajda	Pima, US	2019-07-08
Debra Nairn	Cold spring, US	2019-07-08
Charles McDuffee	Cold Spring, US	2019-07-08
Bonnie Stein	NY, NY	2019-07-08
Jeremy Drysdale	Cold Spring, US	2019-07-08
Paul Tschinkel	Cold Spring, US	2019-07-08

<b>Name</b>	<b>Location</b>	<b>Date</b>
Blank Blank	Norcross, US	2019-07-08
Nina Jody	New York, NY	2019-07-08
Florence Clutch	New York, US	2019-07-08
Pamela Doan	Cold Spring, US	2019-07-08
Pamela Cook	Cold Spring, US	2019-07-08
Katherine Drysdale	Cold Spring, US	2019-07-08
Erik Brown	Cold Spring, US	2019-07-08
Krystal Ford	Philipstown, NY	2019-07-08
Jennie Sexton	Cold Spring, US	2019-07-08
Amy Goldberg	Cold Spring, US	2019-07-08
Trieu Dang	Houston, US	2019-07-08
Jose Rodriguez	Cold Spring, US	2019-07-08
Harley Bryant	Alachua, US	2019-07-08
Melissa Ricketts	Cold Spring, NY	2019-07-08
timothy maxwell	Cold Spring, NY	2019-07-08
Kelly House	Cold Spring, NY	2019-07-08
Melinda Moyer	Cold Spring, US	2019-07-08
Bidu Tashjian	Cold Spring, NY	2019-07-08
Susan Hyatt	Ossining, NY	2019-07-08
Bettina Utz	Cold spring, US	2019-07-08
Dean Lentz	Cold Spring, US	2019-07-08
Davis McCallum	Brooklyn, NY	2019-07-08

<b>Name</b>	<b>Location</b>	<b>Date</b>
Michael Moyer	Philipstown, US	2019-07-08
Keith Sexton	Cold Spring, US	2019-07-08
David Limburg	Cold Spring, NY	2019-07-08
VIRGINIA SOLE-SMITH	Cold Spring, US	2019-07-08
Michael Perricone	Cold Spring, US	2019-07-08
Gaston Alonso	Cold Spring, US	2019-07-08
LJ Langley	Cold Spring, NY	2019-07-08
Edward Kreps	Cold spring, US	2019-07-08
Margaret Yonco-Haines	Garrison, NY	2019-07-08
ANN HAMMOND	Cold Spring, NY	2019-07-08
Jax Taylor	Cold Spring, NY	2019-07-08
James Nicholas	Cold Spring, NY	2019-07-08
Livea Byrne	Cold Spring, US	2019-07-08
Angie Gambuzza	Lindenhurst, NY	2019-07-08
Catherine Serreau Thompson	Irvington, NY	2019-07-08
MICHAEL CASALE	Cold Spring, US	2019-07-08
Nanci McDonald	Cold Spring, US	2019-07-08
Felicity Erwin	Cold Spring, US	2019-07-08
Angela Jones	New York, NY	2019-07-08
suzanne murray	philipstown, US	2019-07-08
charles duffner	Piscataway, NJ	2019-07-08
Chris Porter	Cuyahoga Falls, US	2019-07-08

<b>Name</b>	<b>Location</b>	<b>Date</b>
Steven Loria	Little Falls, US	2019-07-08
Ashley Rauch	Totowa, US	2019-07-08
BARBARA COX	Nutley, US	2019-07-08
Maureen McGrath	Cold Spring, NY	2019-07-08
Claudia Dizenzo	Cold Spring, US	2019-07-08
Jane Hanley	Cold Spring, US	2019-07-08
Sarazina Stein	New York, US	2019-07-08
JAY MUELLER	New York, US	2019-07-08
Catherine Lim	Newark, US	2019-07-08
Christian Ramos	Dows, US	2019-07-08
Anthony Ventura	Petaluma, US	2019-07-08
Cameron Emerson	Mandeville, US	2019-07-08
John Giametta	Cold Spring, US	2019-07-08
Robert Deutsch	New York, US	2019-07-08
wickham Boyle	New York, NY	2019-07-08
Richard Butensky	Cold Spring, US	2019-07-08
Lisa Quartin	Cold Spring, US	2019-07-08
Adam Kozicharow	Cold Spring, US	2019-07-08
Ronan Coleman	Cold Spring, US	2019-07-08
Chris Mathers	Brooklyn, US	2019-07-08
DAWN YOUNG	Lewes, NY	2019-07-08
Diane Spurr	Cambridge, US	2019-07-08



<b>Name</b>	<b>Location</b>	<b>Date</b>
Brayden Santini	Wylie, US	2019-07-08
Laura Nathanson	Cold Spring, US	2019-07-08
Ryan Murphy	Cold Spring, US	2019-07-08
Nancy Berner	Brooklyn, NY	2019-07-08
Diana Hird	Cold Spring, NY	2019-07-08
Diana Cruz-Hasler	Cold Spring, US	2019-07-08
Pamela Coumans	Cold spring, US	2019-07-08
Charles Burleigh	Garrison, US	2019-07-08
Madeline Rae	Little Falls, US	2019-07-08
Jayson Allen	Jacksonville, US	2019-07-08
Doug Starn	Putnam Valley, US	2019-07-08
Isaac Delgadillo	San Carlos, US	2019-07-08
Danny Tran	Honolulu, US	2019-07-08
Richard Wake	Cold Spring, US	2019-07-08
Malachy Cleary	Cold Spring, NY	2019-07-08
Lillian Rosengarten	Cold Spring, NY	2019-07-08
Jennifer Gilleo	Cold spring, US	2019-07-08
Todd Giudice	Cold Spring, NY	2019-07-08
Nils Walter	Garrison, US	2019-07-08
Kalista Parrish	cold spring, US	2019-07-08
sonia ryzy-ryski	cold spring, NY	2019-07-08
alexis lowry	Cold Spring, US	2019-07-08

<b>Name</b>	<b>Location</b>	<b>Date</b>
Edward D Bushek	Fishkill, US	2019-07-08
Allison Sassano	Cold spring, US	2019-07-08
sidney babcock	Garrison, US	2019-07-08
Susan Lowry	Philipstown ny, US	2019-07-08
Vreni Hommes	Cold Spring, NY	2019-07-08
Arely Gutierrez	Broomfield, CO	2019-07-08
Roy Leonard	Astoria, US	2019-07-08
Nicholas Lowry	cold spring, US	2019-07-08
Joe Dizney	Cold Spring, US	2019-07-08
Lara Voloto	cold spring, US	2019-07-08
shari alexander	Cold Spring, US	2019-07-08
Dayna Resi	Willimantic, CT	2019-07-08
Lyn Horst	Cold Spring, US	2019-07-08
David Marzollo	Formia, Italy	2019-07-08
Julia Kisla	Cold Spring, NY	2019-07-08
Damian McDonald	Cold Spring, US	2019-07-08
Eduardo Suastegui	Vallejo, US	2019-07-08
Rosie Gutierrez	Brooklyn, US	2019-07-09
Emanuel Valencia	Santa María, US	2019-07-09
Suzie Gilbert	East Hampton, US	2019-07-09
Kimberly Sevilla	Brooklyn, NY	2019-07-09
Peter Weed	Garrison, US	2019-07-09

**Name**

**Location**

**Date**

Sebastian Ramos-Roux

Hastings On Hudson, US

2019-07-09

Dean Lentz  
345 East Mountain Road North  
Cold Spring, NY 10516

July 7, 2019

Anthony Merante, Chairman  
Philipstown Planning Board  
238 Main Street, PO Box 155  
Cold Spring, NY 10516

RE: Hudson Highlands Reserve

Dear Chairman Merante and Honorable Board Members,

I am writing you today with the following concerns regarding the proposed Hudson Highland Reserve development.

**Negative impact of development on local traffic and Route 9**

Response  
2.90

An adequate study on the traffic impact on Route 9 from the proposed Hudson Highlands Reserve (HRR) project has not been performed. A complete and unbiased study must be performed and evaluated. The proposed project includes, in addition to the 26 homes, an equestrian center with a 100 space parking lot. Along with daily construction traffic, equestrian center maintenance traffic (food and bedding delivery and waste removal), and event traffic, route 9 will become even more congested and dangerous than it is at present regardless of the access point(s) chosen to route 9 from the HRR. Some forms of mitigation would be imminent either by widening route 9 or through the implementation of additional traffic lights.

**Negative impact of development on Ulmar Pond and the Clove Creek Aquifer**

Response  
3A.11

Based on the DEIS performed by the HHR, the Hudson Highlands Land Trust has identified assured negative impact on both Ulmar Pond and the Clove Creek Aquifer primarily as a result from the proposed equestrian center and recommend the required ongoing testing of these two water sources. Who will pay for the ongoing testing? How will test results be qualified and who will enforce negative test results and how?

**Negative impact of development on the Community Character**

Response  
3D.11

The proposed equestrian center and sprawling 26 home subdivision invariably scar this section of East Mountain, the damage will be most likely be visible from many of the area's important hiking vistas such as the network of Scofield Ridge and Fahnestock trail systems.

Response  
2.37

This proposed project is not designed for the Philipstown community but is overtly designed for the benefit of non-residents who will not be concerned or engaged in community issues. The developers continue to guarantee that the HHR Home Owners Association (HOA) will monitor, manage and mitigate any environmental or community concerns. This assurance is a false promise. In the event that the HOA deems it no longer viable to cart away waste from the equestrian center and to dispose of it on location, the town would not be able to control this decision nor be able to provide necessary protections to the aquifer. During this evaluation process as a way to alleviate concerns, the developers have made many

claims to the effect that the HOA will always choose to do what is right for the environment and the community. These claims are not a guarantee. As an indicator of how we can expect the HOA to act were the plans to be approved, we can simply look at the developer's home on East Mountain Road North. They have installed a sprawling set of structures that have little in common with character of the neighborhood, introduced invasive and non-native plant species in their landscaping, do not send their children to our schools, do not know or have relationships with the neighbors, and do not participate in our community apart from their efforts to pursue this development.

The fact that the Hudson Highlands Lands Trust has refused to act as a sponsor this project, is testament to the inauthenticity of the developer's intentions to establish a Conservation Subdivision.

For the above reasons of negative impact on the environment, transit and the community, I respectfully urge the board to push for a conventional subdivision to decrease the amount of homes and omit the equestrian center, in order to best protect the land, waterways, and local traffic routes.

In the event that the conservation subdivision will be granted, I would like to ask the board to insist on clustering the homes further, cutting back the lot sizes and number of homes, moving homes away from the pond, and significantly cutting back the size of the commercial equestrian center. Please, for the sake of our town, do not set a precedent for other conservation subdivisions by approving this masterplan.

Thank you.

Yours sincerely,

Dean Lentz

**Subject:** Fwd: Hudson Highlands Reserve  
**From:** Jon Kiphart <kiphart@gmail.com>  
**Date:** 7/8/2019, 4:27 PM  
**To:** tpercacciolo@philipstown.com

----- Forwarded message -----

**From:** Jon Kiphart <kiphart@gmail.com>  
**Date:** Sun, Jul 7, 2019 at 9:47 AM  
**Subject:** Hudson Highlands Reserve  
**To:** <amerante@philipstown.com>

As a homeowner who has lived full time on Esselborne Road for the past 19 years, I have strong concerns about the development of the Hudson Highlands Reserve.

The first concern is the management of traffic. As the NYSDOT has noted in a letter dated June 7th:

Response  
2.90

"...there is no mention of traffic in the DEIS and the actual Traffic Impact Analysis and/or NYSDOT comments of August 2, 2018 are not included in the Appendix."

This indicates to me that this development has not been thoroughly thought out.

A development of this scale with the attendant commercial and residential traffic would have a powerfully adverse affect on our quality of life here, as it would increase traffic pressure on two already very dangerous intersections where the north and south mountain roads access US 9.

Response

3A.11,  
3A.20

I am also very concerned with the lack of regard the developers have shown for the impact this will have on the lower watershed of our mountain home. The addition of a residential area would be bad enough, but the impact of an equestrian center on the scale they are talking about would be profound on both the natural watershed and the surrounding residential neighborhoods.

Best Regards-  
Jon Kiphart  
38 Esselborne Road

**Subject:** Re: HHR Comments  
**From:** Rick Wake <rick@rickwake.com>  
**Date:** 7/8/2019, 4:26 PM  
**To:** tpercacciolo@philipstown.com  
**CC:** amerante@philipstown.com

For the record, my address is 325 E Mountain Rd N, Cold Spring NY 10516

On Mon, 08 Jul 2019 16:24:27 -0400, Rick Wake wrote:

Dear Philipstown Planning Board,

**Response** 2.17 The Hudson Highlands Reserve project must be rejected. It does not follow the letter or the spirit of the open space law. The purpose of the open space development is to preserve large tracts of open space land in order to maintain the rural appearance and environmental resources of the Town of Philipstown. The HHR project is a farce of an attempt to appear green while continuing the suburban sprawl that the law was designed to prevent.

Sincerely,  
Rick Wake

Irene O'Garden

July 3, 2019

Anthony Merante, Chairman  
Members of Philipstown Planning Board  
238 Main St  
Cold Spring, Ny 10524

Re: Hudson Highlands Reserve DEIS

Dear Chairman Merante and Honorable Board Members—

Thank you for giving the public the opportunity to comment on the Draft Environmental Impact Statement for Hudson Highlands Reserve and for conducting such a brisk and civil public hearing on June 18.

The DEIS states on page 81 that “many of the wildlife species observed were see in the habitat bordering the pond.” Ain’t it the truth.

I know Ulmar Pond and the surrounding lands extremely well—My husband John Pielmeier and I lived on Horton Road from 1984-1996. I’ve watched the darting kingfishers and the sleepy turtles, thrilled to the songs of the wood thrush and the owls there. I’ve swum with the geese, been blistered by the poison ivy and healed by the nearby jewelweed. It is truly land well worth conserving.

If this project is to be our first Conservation Subdivision, let us be certain that it does indeed conserve what is irreplaceable.

With this in mind, I fully support the Hudson Highlands Land Trust’s eight recommended actions on this project.

**Response** Because I am so familiar with the pond, I want to especially support the HHLT’s  
**3B.25** recommendation to remove the five houses slated for the West Side of Ulmar Pond and relocate them with others on the northwest side of the property to preserve contiguous protected land and to ensure the migration corridor of amphibians from Clove Creek to Ulmar Pond.

**Response** I am also concerned that pages 38-39 of the DEIS state that critical maintenance of the pond,  
**3A.18** storm and waste water management will be the responsibility of a Homeowner’s Association. (It also says on p 39 that the equestrian area is part of the HOA responsibility, including the horse barn and paddock area, though elsewhere in the statement this is referred to as a commercial enterprise. Confusing.)





Irene O'Garden

The research I conducted on the NYS Attorney General's website states that Homeowners Associations are like not-for-profit corporations that are either managed by volunteer board members or by a hired management company.

**Response 2.35** These boards can change any rule they like once they have been elected, meaning that regulations about tree cutting, fertilizer runoff, dumping in the pond and so forth can easily be changed if the HOA finds it convenient. And who is really going to be looking to see what pesticide their neighbor is using? The AG's website is clear that HOAs and their board members are extremely difficult to prosecute should homeowners or the Town have a complaint.

**Response 3A.12** Hence, it is critical that the Town oversee regular water testing of Clove Creek, Ulmar Pond and the Aquifer before, during and after construction.

**Response 2.6** Will the homeowners be paying attention? The DEIS describes the public need and benefit served by this project as the need for second homes for New York City dwellers. While these folks may long to serve on a volunteer board for their second home, their focus may be elsewhere. They will likely hire a management firm with no personal connection to the property.

One of the things that makes this land so attractive is the 82-acre Clove Creek Preserve next to it, which was seeded by a 27-acre donation of land along the creek that my husband and I gave to the HHLT in 1992.

The DEIS contains frequent mentions of exotic and invasive species. Let us remember that humans, too, can be a pretty invasive species.

Sustainable houses are a worthy goal. Let us sustain the habitats that surround them. Let us have our first Conservation Subdivision be worthy of the name and serve as a model for those to come after.

Someday we will be absent. Our decisions will live on.

Thank you for your service to our community—

Warmly,



Irene O'Garden and John Pielmeier (*in absentia*)



**Subject:** Fwd: For Public Hearing--Hudson Highlands Reserve  
**From:** Julia Famularo <jfamularo@philipstowndemocrats.com>  
**Date:** 7/8/2019, 3:19 PM  
**To:** Tara Percacciolo <tpercacciolo@philipstown.com>

Hi Tara,

Ande may have already forwarded my email to you. Just making sure.

Best,  
Julia

Begin forwarded message:

**From:** Julia Famularo <juliafamu@gmail.com>  
**Subject:** For Public Hearing--Hudson Highlands Reserve  
**Date:** June 17, 2019 at 6:06:45 PM EDT  
**To:** [amerante@philipstown.com](mailto:amerante@philipstown.com)

Dear Ande, and Members of the Philipstown Planning Board:

I am writing to express my opposition to move the Hudson Highlands Reserve Project forward for the following reasons:

- **The project is too big**, with too many houses spread out on the property, and too many horses. It is unlike any housing development in our Town for its size and character;
- **Conservation Subdivision:** the project does not represent the spirit of a conservation subdivision. The housing is not clustered, the presence of a large equestrian center and its horses may cause ecological damage, and the land that would be 'conserved' is, in any case, not really developable because of steep slopes and other terrain-related obstacles. As the first of its kind in Philipstown, we should ensure that the project is a model example of what a conservation subdivision should be, not a loose and feeble compromise;
- **Water bodies are vulnerable**, including the pond, Clove Creek and the aquifer, and other wetlands in and near Fahnestock State Park. Philipstown has been able to protect its water and quality by careful scrutiny of development projects. However, this outsize project is situated above the aquifer that serves scores of households in our Town. The risk for contamination and overuse to this essential water body alone should be reason to pause approval of the project. In a June 2007 Groundwater Report for the Town, the following advice for protecting the aquifer was offered: *"because of the current*

Response  
2.17

Response  
3A.19

*use levtpèrels and aquifer vulnerability to contamination, a high level of groundwater protection is recommended for the Clove Creek sand and gravel aquifer found along the northern Route 9 corridor.” (<https://www.philipstown.com/topgroundwater.pdf>);*

Response  
2.43

- **Remediations:** the developers have stated they will offer many remediations and plans for addressing environmental concerns, but what assurance do neighbors and residents of Philipstown have that these promises will be kept? How do we ensure that the residents will not overuse pesticides and fertilizers on this fragile ecosystem? The interests of the residents of Philipstown who may have to deal with compliance, the effects of runoff, and other ecological damage must be considered;

Response  
2.34,  
2.98

- **Insufficient sales:** related to the concern noted above is one is that insufficient sales of units could mean that insufficient income would be generated that would be intended to pay for all of the remediations listed in the proposal. Will the Town be forced to provide remediations, or will it have to sue the residents living in the development to obtain proper oversight and compliance? What protections does the developer offer the Town after the project is begun? What if we are stuck with a boondoggle?;

Response  
3D.1

- **Impact on schools:** while the number of households in this proposal may not generate an unsustainable influx of student population to the Haldane Central School District, what precedent does this large development set for future developments that may also have determined and deep-pocketed developers? Will the Board be able to say, “No more—our services and school district cannot absorb this increased population”?

Response  
2.87

- **Vehicle traffic:** Route 9 is already heavily overused by tractor-trailers and other traffic, and this development will likely create more unsafe conditions on the road. If you don't believe me when I say that the road is unsafe, try making a southbound left turn across traffic during rush hour.

Philipstown has been able to control development in order to preserve a landscape and way of life that is beneficial to all who live, work and visit here. It is because of this careful concern for the environment, and our dedicated Planning Board that does its best to prevent overbuilding, that our Town maintains its character and remains a destination for those who desire to escape urban/suburban congestion.

This project is wrong for our Town in its current state. There are too many aspects in which this project could cause actual harm to our landscape, wildlife, and natural resources. It should be rejected as a conservation subdivision, because it isn't one. It should also be rejected because it does not belong here or provide benefit to the Town or its residents. And it should be rejected because it does not provide sufficient protection or planned response when things go wrong. I hope the Planning Board will request significant changes to this proposal before allowing it to move forward.

I sincerely appreciate your time and consideration.

Sincerely,

Julia Famularo

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Julia Famularo  
[juliafamu@gmail.com](mailto:juliafamu@gmail.com)

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Julia Famularo  
[jfamularo@philipstowndemocrats.com](mailto:jfamularo@philipstowndemocrats.com)

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Hudson Highlands Reserve

75

Subject: Hudson Highlands Reserve  
From: hvreanfia@yahoo.com  
Date: 7/8/2019, 3:31 PM  
To: tperracchio@philipstown.com

To Chairman Nerwinde and The Phillipstown Planning Board

I will try to make this short:

**Response** In my mind conservation is saving trees, protecting the environment, and respecting the wildlife that live in a particular habitat.

**3D.12** I don't feel the Hudson Highlands Reserve is doing that. It sounds like all the buildable land. (I am not sure 45 acres) is going to be "clear cut" all the trees will be cut down. I am assuming that all around the houses and horse area, all the trees will be removed. Since this is an MDR, I don't believe that any of the owners can plant trees and NEVER will there be a tree canopy to hide the subdivision from the vista points.

**Response** User Pond: It appears there is going to be some wall around the pond. animals have been coming to this pond for years. If this was a conservation subdivision, why aren't those animals being protected? What kind of wall will be around the pond? The area around the houses, including the backyards that back up to the pond, will that be all green fertilized grass as in Glastbury Ct?

**Response** The Aquifers: what about all the runoff from those beautiful and dandelion free lawns. Where are all the herbicides, pesticides, fungicides going to go? What about the salt that will be used in the winter? How many square feet of blacktop are on the roads and parking lots?

**Response** Water usage: When the calculation was used for water usage was it taken into account the visitors that may come to use the bathrooms during horse shows, the bathing of the horses, the swimming pools? Will there be ASEPAB rentals? Those people can get 25 guests in their houses. If this turns out to be the case we will have to outlaw ASEPAB and the like in Phillipstown.

**Response** How can horse shows be regulated? How can you stop the horses from being ridden on East Mountain Rd an already narrow and dangerous road? How would you stop anyone from going around the fire exits?

**Response** 2.39 route 9 DANGER: This spring it took several hours for me to get home since there were 3 separate serious accidents on route 9 not far from East Mountain. Perhaps a new traffic study is needed. Traffic and traffic accidents along Route 9 seems to have increased in the last few years. Horse trailers, nature trucks, feed trucks, hay wagons, gardeners, employees, visitors, veterinarians, owners, is this what we need on Route 9, more tractor trailers making turns of Route 9?

**Response** 2.90 There is just too much going on in this subdivision with a great possibility that the water can be contaminated or even walls going dry. Once it is approved there is little the town can do. It must be done right without a burden to the town after the builder leaves. This subdivision really doesn't fit into the vision for Phillipstown. The lawns are too sterile, it doesn't protect the environment, no trees, weeds, dandelions or wild animals allowed.

Thank you all for caring about our wonderful town

Anita Chester  
North Highlands

**Subject:** Fwd: Reject Hudson Highlands Reserve  
**From:** Neal Zuckerman <nzuckerman@philipstown.com>  
**Date:** 7/8/2019, 3:15 PM  
**To:** Tara Percacciolo <tpercacciolo@philipstown.com>

Sent from my iPhone

Begin forwarded message:

**From:** Martha V North <[martha0806@optonline.net](mailto:martha0806@optonline.net)>  
**Date:** June 22, 2019 at 8:52:54 AM EDT  
**To:** [amerante@philipstown.com](mailto:amerante@philipstown.com)  
**Cc:** [plewis@philipstown.com](mailto:plewis@philipstown.com), [kconner@philipstown.com](mailto:kconner@philipstown.com), [nzuckerman@philipstown.com](mailto:nzuckerman@philipstown.com),  
[dgagnon@philipstown.com](mailto:dgagnon@philipstown.com), [dhardy@philipstown.com](mailto:dhardy@philipstown.com), [ntomann@philipstown.com](mailto:ntomann@philipstown.com)  
**Subject:** Reject Hudson Highlands Reserve

David J. North  
21 Thunder Rd.  
Garrison, NY

Dear Mr. Merante,

I am writing to please ask you, and the Planning Board, to reject the Hudson Highlands Reserve development application.

I have voiced my concern in the past to the Board and local newspapers about development in Philipstown.

I believe it is reaching a critical point, and serious measures, perhaps a moratorium, are in order to curb further developments such as this one.

I am speaking for wildlife, and its habitat. I am speaking for our already burdened air and water quality. I am speaking for those of us who sincerely believe the Hudson Highlands are a unique ecosystem that deserves to be protected above and beyond what even most would think is necessary, EVEN WITH all the protected state land we have surrounding us.

You have the opportunity to stop the continued, incremental diminishment of this beautiful ecosystem we call home by NOT approving this development, and future ones like it.

Sincerely, David J. North

**Subject:** Fwd: development on East Mountain  
**From:** Bidu Tashjian <biduceleste@gmail.com>  
**Date:** 7/8/2019, 3:04 PM  
**To:** tpercacciolo@philipstown.com

----- Forwarded message -----

**From:** Bidu Tashjian <biduceleste@gmail.com>  
**Date:** Sun, Jul 7, 2019 at 11:11 AM  
**Subject:** development on East Mountain  
**To:** <amerante@philipstown.com>

I am a 19 year full-time resident of Philipstown, I live on Esselborne Road. I want to voice additional concerns regarding this development and the impact it will have on my life and the many woodland birds and mammals that also call it home.

**Response**

**3B.51** Just this morning I identified a wild bird that I hear presently outside my window. It is called a Wood Thrush. It has the most beautiful flute-like call you can imagine. As I sat this morning with my cup of tea, I was able to finally see this bird singing! They are illusive and hard to spot, but their beautiful song will remain with you. This beautiful bird is a threatened species due to loss of habitat. When tracts of forests are broken up, birds like the Wood Thrush suffer.

The proposed development project would harm this beautiful bird that is already a threatened species. It breaks my heart to think that harm might come its' way.

**Response**

**2.43** I also want to address the fact that this development would house weekend dwellers only. I live next door to a house that is only occupied a couple times a month, if that. My husband and I endured an endless stream of contractors when the house was sold to the said owners. They are never there but the empty house has a regular staff of cleaners and contractors. There is even a pesticide application that is sprayed monthly and wafts into my property and who knows what other dangerous chemicals and poisons are used. Mice can be a big problem with life in the woods and when no one is home, they will take over in no time.

When this couple was spotted we had them over for dinner with a home-made blueberry pie. We haven't heard from them since. They have a busy life elsewhere and can't be bothered by the "locals". How is this going to affect our town with all these weekend homes sitting empty and the owners are absent when it comes to matters of safety and concern for our homes and town?



Let them consider another flat land environment for all of their horses and manure, this whole development stinks, literally. My other neighbor has 2 horses and sometimes the smell is so bad you have to stay indoors.

Thank You for hearing my concerns and thank you for your time.

Ms. Bidu Tashjian

**Subject:** Fwd: Hudson Highlands "Reserve"  
**From:** Bidu Tashjian <biduceleste@gmail.com>  
**Date:** 7/8/2019, 3:03 PM  
**To:** tpercacciolo@philipstown.com

----- Forwarded message -----

**From:** Bidu Tashjian <biduceleste@gmail.com>  
**Date:** Wed, Jun 19, 2019 at 12:00 PM  
**Subject:** Hudson Highlands "Reserve"  
**To:** <amerante@philipstown.com>

Thank You for giving me the opportunity to share my opinion on the development. I am a full-time resident on East Mountain and have been since 2000. I know I am not alone when I say that we moved here hoping for a better quality of life. That quality includes owning land and having the opportunity to interact with Nature.

I fail to see how a development of 25 houses with 40 horses and barns will enhance the area I live in. This is a mountain with rough terrain of rock, trees and wetlands. It is not suitable for horses.

When I think of the destruction of the land for the building of this development my mind races with thoughts of blasting through rock, bulldozers, graders and chainsaws.

I have lived through development of houses near me and know the noise and disruption it brings.

Response

3A.12 I am not happy to hear that these homes will be for weekend use only. Where is the motive for these residents to get involved in our community and its' causes?

I also want to be a voice for the many animals and creatures that call this area home, many will say if you don't see the animal it does not live there. Animals migrate and travel through the area constantly, they use these routes to travel their daily and evening searches for food, etc. This can be confirmed with trail cameras that we have set up on our property. Driving through a road full of frogs is not fun. Just today I saw a dead snake on the road. And who hasn't stopped to assist a turtle crossing the road?

Once this area is destroyed it can never be brought back, do you want to be associated with

Fwd: Hudson Highlands "Reserve"

that?

Thank You, Ms. Bidu Tashjian

Bettina Utz  
 345 East Mountain Road North  
 Cold Spring, NY 10516

To:  
 Philipstown Planning Board  
 238 Main Street, PO Box 155  
 Cold Spring, NY 10516

Cold Spring, July 8, 2019

### **Hudson Highland Reserve**

Dear Chairman Merante, dear members of the Planning Board,

I have been living on East Mountain Road North for 12 years now with my family, and I am writing you today with the following concerns regarding the planned conservation subdivision, proposed by Horton Road LLC.

My concerns can be summarized into four points:

- 1. Access to the Development and Traffic Study**
- 2. Commercial Equestrian Facility on Preserved Land**
- 3. Environmental Issues**
- 4. No Guarantees for Developer's Claims**

---

#### **1. Access to the Development and Traffic Study**

- Response 2.85** a. Alternative access to the development needs to be studied if DOT doesn't allow access directly from Route 9. East Mountain Road North and Horton Road cannot provide sufficient access without causing major traffic issues on both roads.
- Response 2.90** b. A full traffic study still needs to be performed.  
 c. Increased traffic through East Mountain Road North will cause delays for the school bus. If the bus is delayed for any reason during its first run, it will be late for the elementary school run.
- Response 2.67** d. Increased noise and wear and tear on our small residential roads by construction, and from the operation of the large commercial horse facility (including horse events and shows.) The equestrian center is planned with a parking lot for 100 cars in anticipation of large events.

- Response 2.67** e. Entering East Mountain Road North from Route 9 is already very dangerous. Adding traffic from a commercial facility will increase potential for accidents.

## 2. Commercial Equestrian Facility on Preserved Land

- Response 2.65**
- a. The town code demands 1 acre of land per horse, but this plan allots 11 acres for 40 horses. Not only is this a violation of the code, but also are the horses not kept in a humane way.
  - b. It needs to be thoroughly examined if this equestrian center counts as "agricultural use" and if it may legally be built on the preserved portion of the land.
  - c. Residential developments with equestrian facilities, where the idea of a certain lifestyle draws home buyers, is one of the latest trends in real estate developments. It has to be studied if this type of development is in accordance with our community character. These developments also often fail financially on the horse facility part.
  - d. Negative effects on wildlife, noise levels, and traffic have not been studied adequately.
  - e. In point V.C.5 of the developers DEIS, it is stated that even when cutting the horse occupancy by only 10 horses, the facility will run on a deficit. What if they cannot maintain the maximum 40 horse occupancy at any time? The facility could go bankrupt very quickly. Who will then take care of the oversized buildings? A HOA could easily refuse to maintain it.

## 3. Environmental Issues of the Proposed Development and its Potential Alternatives

- Response 3B.54** a. Wildlife and protected lands are being fragmented/interrupted by the development.
- Response 2.43** b. Potential pesticide application on lawns situated near or on the waterways (Clove Creek, Ulmar Pond) will have adverse effect on water quality.
- Response 3C.1** c. Road salt during the winter which will run off into the waterways and pose a risk to water quality, wild life, and vegetation.
- Response 3A.19** d. Residential water use and its environmental impact has not been studied to my satisfaction.
- Response 3C.4** e. Horse facility will produce roughly 2000 pounds of manure every day. Runoff from manure is an environmental hazard.
- Response 3A.24** f. Water use of the equestrian facility (5-10 gallons water per horse per day, which equals 200-400 gallons of drinking water each day for 40 horses) seems wasteful and not in concordance with a land preservation.
- Response 2.31** g. Weekenders commuting from NYC, and horse owners driving in from sometimes remote locations, plus the visitors to the horse events will contribute to air pollution, which is not in accordance with a climate smart community.

- h. In point V. of the DEIS, the developer proposes alternatives to the project, one of them being mining of the land. It has to be established that mining cannot be allowed due to environmental concerns.

#### 4. No Guarantees for Developer's Claims

- Response 3D.1** a. Weekend use only cannot be guaranteed, so there will be potential impact on our school and higher taxes for everybody.
- Response 2.35** b. It cannot be guaranteed that a HOA will not vote out certain rulings like pesticide use, frequency of manure removal, general maintenance etc.. The effects of a mismanaged development will be a burden to our community.
- c. The use of the horse facilities could easily be changed from the promised dressage academy to trail riding stables, and in turn encroachment on the protected land cannot be ruled out.
- Response 2.85** d. "Emergency only" access from East Mountain Road North and Horton Road cannot be guaranteed at this point.
- Response 3D.1** e. The claim that the occupants of this development will not use any of the town's infrastructure, services, or resources is wrong. Need for emergency services and road repairs will definitely go up, especially with a 7 day per week year round horse center operation.

For the above reasons of negative impact on the environment and the community, I respectfully urge the board to not allow the development as a conservation subdivision; please consider a conventional subdivision, which will decrease the amount of homes to around 10 and omit the equestrian center. Please, for the sake of the land, wild life, waterways, and our community character, don't let this become a precedent for future developments.

Thank you.

Yours sincerely,

Bettina Utz

ANN HAMMOND  
307 E Mountain Rd S. Cold Spring, NY 10516 fensedgefarm@gmail.com

Chairman Anthony Merante  
Town of Philipstown Planning Board  
238 Main St.  
Cold Spring, NY 10516

July 7, 2019

Dear Mr. Merante and Members of the Board,

Re: Hudson Highlands Reserve (HHR)

I just re-read my two previous letters dated Feb 15 2018 and June 17 2019 and studied the Nov. 30 2017 and June 8 2019 letters and appendices from Hudson Highlands Land Trust (HHLT), and I notice that I'm feeling really frustrated.

What jumps out is how little effort the HHR has made to mitigate the very real concerns that the proposal engenders, and just how much time, energy and money the Planning Board, the community and the HHLT has spent to do a job that should have been done properly by the HHR.

I have personally spent hours studying the proposal, and that's nothing compared to what our volunteer Planning Board and the non-profit HHLT have done. Like many others, I addressed my main concerns regarding the impacts of the proposed development in letter and in person. As I noted at the June 20<sup>th</sup> Planning Board meeting, essentially none of those concerns were mitigated in the DEIS, nor those of dozens of other citizens and entities.

The HHLT and others have offered a serious and exhaustive explanation of the significant defects in this application, especially poor conservation design and flawed or missing science; what I'd like to address here is the underlying flavor of this application, and the apparent unwillingness of the HHR to simply do a good job.

If this is how the enterprise is planned, I shudder to think how it would be executed.

How is it possible that five years after the inception of this project the only serious science I see comes from outside of the project? Indeed, it is clear that, at best, the HHR has done a shoddy job with conservation design, the conduction of scientific study, the interpretation of data, and the resulting DEIS. At worst, it has obfuscated, misrepresented and deceived.

Response  
3A.22,  
3B.60,  
3B.38

Certainly, it has cherry-picked scientific theories and data, using outdated hydrological studies and the aged Lathrop study, which it argues excuses forest fragmentation, while ignoring other points in the same study that did not, as well as the absurd claim that wildlife does not traverse

**ANN HAMMOND**

307 E Mountain Rd S. Cold Spring, NY 10516 fensedgefarm@gmail.com

land with a greater than 25% slope (which, if true, would make the proposed developable land have an even higher conservation value.)

More disturbingly, it has avoided conducting comprehensive scientific studies of the property despite having enjoyed five years of opportunity and having its own consultants' recommendations to do so on record.

**Response** The HHR has also misled stakeholders — including the Planning Board and residents of East  
**2.85, 2.90** Mountain, Esselbourne and Horton Roads — by avoiding mention of the DOT rejection of Route 9 access plans, as well as avoiding submission of requested data to the DOT *for five years*.

I can't know if these actions are based in deliberate deceit, incompetence or hubris, but none of them bode well for a successful endeavor.

It seems to me that the HHR's stock response to community, cultural and environmental concerns is to simply repeat that this is a great plan, so give them what they want.

When my children were toddlers, they did the same thing. But it is highly disturbing behavior from a business that is asking for a huge boon that will impact the future of Philipstown for generations to come, while offering up essentially nothing in return.

Frankly, as the proposal stands right now, I don't see how it even merits the additional density, never mind the enormous and unsustainable equestrian facility.

**Response** Regarding that monstrosity, I don't believe it is compatible with Philipstown's master plan, with a  
**2.65** conservation subdivision, or that its footprint should be counted as conservation acreage. It is an industrial operation — as one gentleman pointed out, a Confined Animal Feedlot Operation (CAFO.)

The entire operation is unsustainable. It creates a large impermeable land feature, negating the concept of an agricultural use. The horses have no food. They have no land to graze or even walk on freely. Leaving aside the fundamental injustice to a sensitive herd animal, all of their feed would need to be shipped in and the resulting waste shipped out.

In light of Putnam County's and Philipstown's pursuit of Climate Smart certification, as well as the State of New York's passage of the Climate Leadership and Community Protection Act, it is unreasonable for the energy footprint of the proposal to remain unconsidered as part of its environmental impact.

I sincerely doubt that two dozen LEED certified homes will counterbalance the carbon footprint of a CAFO. The amount of energy required to truck in and out food and waste is absurd, never



ANN HAMMOND

307 E Mountain Rd S. Cold Spring, NY 10516 fensedgefarm@gmail.com

mind the years of construction, increased energy consumption and traffic from weekend residents, visitors, competitors, staff, contractors, suppliers and horse trucks and trailers.

I understand that the facility might generate tax revenues and a few jobs, but I do not see a net benefit to Philipstown, nor how the staff will afford to live in our community.

This is not an intelligent or respectful proposal, and the Hudson Highlands Reserve does not appear competent, responsible, professional or trust worthy. The HHR has not respected conservation design guidelines, conducted serious scientific study, addressed community concerns, mitigated environmental impacts, communicated openly and honestly or considered energy impacts. This is not a conservation subdivision.

How can Philipstown be Carbon Smart and approve a Climate Stupid conservation subdivision?

Respectfully submitted,

Ann Hammond



----- Original Message -----

From: ricketts <ricketts11@optonline.net>  
To: amerante@philipstown.com  
Date: July 8, 2019 at 1:44 PM  
Subject: HHR Development

Dear Philipstown Planning Board,

I am writing to inform you that I have concerns that the proposed HHR Development may have adverse impacts on the wildlife, Clove Creek, and the water supply. As a resident of Horton Court, I am also very concerned about the potential traffic. Though the developer states repeatedly in the DEIS document that only emergency access would be granted from Horton Road and East Mountain Road North, it appears that they have not obtained any approval to access Route 9. The amount of traffic that will be generated by this development is well more than either of these roads can handle, and the impact of this traffic would most certainly adversely affect the character of this community. We would basically be allowing a commercial development with access through a quiet residential community. We are talking about a lot more traffic than would be generated by 25 homes, we are talking about employees of the facility, trucks to supply the facility as well as carrying out waste, parents driving their kids to riding lessons, as well as people attending events. It is unclear to me why the Developer would be going forward with environmental studies without first obtaining approval from the DOT for road access, perhaps they think if they can't get the approval they will be able to just go ahead and use the existing access from Horton Road and East Mountain Road North. I would ask that the developer gain DOT approval for a new road before any approvals are granted, or any approvals be contingent upon DOT approval.

Sincerely,

Melissa Ricketts

34 Horton Court

Response  
2.85,  
2.90

July 7, 2019

Steven Loria  
541 E Mountain Rd N  
Cold Spring, NY 10516

Anthony Merante, Philipstown Planning Board Chairman and the Philipstown Planning Board  
Philipstown Town Hall  
238 Main Street  
Cold Spring, NY 10516.  
RE: Hudson Highlands Reserve – Comments for February 15th 2018 Public Hearing

Dear Chairman Merante and Honorable Board Members:

This letter is related to Hudson Highlands Reserve Conservation Subdivision project, which encompasses the property located below East Mountain and bordered by Route 9, Horton Road, E Mountain Road N (EMRN) and E Mountain Road S (EMRS), by developers Horton Road LLC.

Please also refer to my written comments I sent to you and the Philipstown Planning Board (Planning Board) on February 11, 2018, which I've included with this letter, since no changes have been made to the original proposal. I also spoke at the last Planning Board meeting on June 20, 2019 at VFW Hall. Therefore, I will try not to repeat what I've already wrote in that letter or what I spoke about at the June 20 Planning Board, but ask that you to ensure that my original letter and spoken comments are part of my formal comments on this project and that they are part of my new comments being submitted today.

**Response  
2.17,  
3B.65**

Firstly, I'd like to say that the proposed project looks to take unfair advantage of our zoning code and what has been stated as goals of our community in the Philipstown's Comprehensive Plan, which serves as the backbone of our zoning code. The project, as submitted, should not be approved by Philipstown.

Secondly, I am in full agreement with every point made by the Hudson Highlands Land Trust (HHLT) in all of their publicly comments, letters and spoken points made against this project. I've also carefully reviewed HHLT's June 18, 2019 comment letter and memo sent to the Planning Board Chairmen, Anthony Merante, and to the Planning Board, respectively, regarding the Draft Environmental Impact Statement (DEIS). I am full agreement with the major concerns and their eight (8) recommended actions in their letter, as well as the summary-level and detailed-level comments in the memo to the Planning Board. Rather than repeat any of their comments and recommendations in this letter, I would instead simply ask their letter and memo be entered into the record as my comments and recommendations as well. The letter and the memo may be found at <https://www.hhlt.org/wp-content/uploads/2019/06/HHLT-Comments-on-HHR-DEIS.pdf>.

I would also urge the Planning board to read the letter that Michelle D. Smith of the HHLT wrote to the Putnam County News and Recorder, dated June 12, 2019, entitled, "Will the Frog and Turtle Survive?" and may be found at <https://www.pcnr.com/articles/will-the-frog-and-turtle-survive/>.

Thirdly, while I spoke at the meeting myself, I also listened very carefully to what the other speakers had to say, all of whom were opposed to the project as it is being proposed. Many of these speakers have impressive backgrounds with a wide range of expertise. But, even if they are not subject matter experts in a particular field, they have all raised important concerns and questions and therefore, I'd like to restate many of them in my letter as **my concerns as well**. I ask that the Planning Board consider deeply, the concerns each of them have made and ensure that all questions receive acceptable responses before any approval is granted for this project. The full video of this meeting, as you know, may be found at:

[https://www.youtube.com/watch?v=KLy7gaE6BIU&feature=youtu.be&fbclid=IwAR3jGiBELg3jxUnmO-a0Eisb\\_p2kets8Velo8fQ6C67r294iCCznIW-c7o](https://www.youtube.com/watch?v=KLy7gaE6BIU&feature=youtu.be&fbclid=IwAR3jGiBELg3jxUnmO-a0Eisb_p2kets8Velo8fQ6C67r294iCCznIW-c7o)

Listed below are most of the speaker's concerns or questions. I have also inserted additional comments, as appropriate, by me in relation to points raised by the speakers. These additional comments by me may be found embedded after each speaker's comments in *italicized* font. Please note that I did not repeat my comments if there were similar points raised earlier in this letter. Please excuse me if I didn't get the spelling of their names correct.

**Public Speaker #2:** Nat Prentice, who lives in Garrison. He reminded us about the relevance of the Philipstown's Comprehensive Plan. Mr. Prentice is serving as the coordinator in the update committee for the updated Plan, known as Philipstown 2020. He spoke about the plan being the backbone for the law in concise and unambiguous language. He stated that when the law is subject to various to various interpretations, as it has in this project, it is important to go back to the plan, particularly since this law is being interpreted for the very first time. He read from Chapter 3, Section R, 2.4 and quoted the following:

**Response 3C.5** • Comprehensive Plan Goal Implementation Action R 2.4 is "Allow open space (cluster) development, with **safeguards to ensure that such developments do not lead to more development than would otherwise occur** and that they preserve open space that the Town wishes to protect."

**Response 2.29** He added if the applicant were to build as a conventional subdivision, the property would only allow 10 or 11 houses.

*I ask the Planning Board, too, that Comprehensive Plan Action R 2.4 be carefully considered and evaluate an alternative that would look more like a conventional subdivision with only 10 or 11 houses and with no equestrian facility.*

**Response 2.27** Public speaker # 3: Susan Anspack, who lives on EMRS. She reminded the Planning Board that there have been **recommendations made that would permit development, but on a scale that would be consistent with this site.** She spoke about the plan of using a **conservation subdivision** for this plan and that it is **inconsistent with the character of the community and with the intent of the regulations enabling such sub-divisions.** She also reminded the Planning Board that none of the suggestions from the public were accepted in the DEIS, and thus no changes were made to the initial proposal. She added that there are **many concerns that should stand in the way** of this project as it is current being proposed. She also, importantly, raised concerns that the developer has **not yet addressed the need for a traffic study, even though the NYS Department of Transportation (DOT) has been asking for traffic detail since 2014 and has been raising a number have of issues that still not been addressed,** including concerns they raised in a June 7, 2019 letter to the Planning Board, pointing to the State Environmental Quality Review Act (SEQR), the DOT, as an involved agency, are **unable to endorse such a project.**

**Response 2.89, 2.85** *I would like to add here that the DOT has already stated there should be no access to the site from Route 9 and that developer has stated that EMRN and Horton Road could also not be used for access unless for emergencies. What, therefore will be done to prevent access via EMRN and Horton Road? I am very concerned about access via EMRN, which is a very steep, curvy road prior to reaching the access for this property. In addition to this safety concern, I am very concerned with additional traffic and subsequently more dangerous situations for vehicles making a left onto EMRN from the southbound lane of Route 9. Speaking from experience over the last 12 years living on East Mountain and taking this access, vehicles, including large 18-wheel trucks, pass stopped vehicles attempting to make this turn and nearly side swipe those stopped vehicles. Many accidents have already occurred here. Public speaker # 11 stated she was in a bad accident at this intersection itself. Access to the property must not, therefore, be via EMRN.*

Response  
2.70

Public speaker #4: Glen Lowery, who lives on Horton Rd. He spoke about the large scale of this project and the scale of the **Equestrian Center**. He noted the 40-horse barn, out-buildings, waste removal, being placed in the middle of a beautiful environment. He said it would have a **negative impact on Clove Creek** and the natural habitat that are there and urged the Planning Board to walk the land and imagine **how the waste removal would be addressed**.

*I have deep concerns with both Clove Creek and the Clove Creek Aquifer and how the tremendous amount of waste forty (40) horses will will produce.*

Response  
2.17,  
3B.65

Public speaker #6: Jocelyn Aposello, who lives in Garrison and runs a small farm. She voiced **significant concerns** with the **precedent** that approval of such a development under a **conservation subdivision** could be set to allow this under a Conservation subdivision.

*I have significant concerns as well with the precedent being set with this project and urge the Planning Board to make sure we stand by our community's values, as expressed in Comprehensive Plan as well as in what is written, including the intent of the regulations in our zoning code and get our community's first major conservation subdivision right!*

Response  
2.17,  
3B.65

Public speaker #7: Jan Baker, spoke on behalf of he and his wife, who reside in Garrison. He said that he supports development, but only in accordance with laws and regulations. He commended the points of the concerns raised by the HHLT. He raised the need to balance the rights of the property owner against the welfare of the local community, the protection of water, wildlife habitat, and vegetation. He spoke about the **critical importance of**

Response  
2.49

**who holds the conservation easement, how the community would monitor compliance, and what the enforcement remedies would be.** He put his trust in the Planning Board and asked that they work with the developer to get this right.

*I'll add to this concern that what must be addressed is how the town will be able to enforce compliance to whatever may be approved where an HOA is managed through its own rules and by-laws?*

Response  
3D.2

Public speaker #8: Heidi Wendal. She mentioned she was a newcomer to the area from NYC and the great hiking opportunities and what the area offers to nature lovers. She stressed that the **first Conservation Subdivision should be a true Conservation Subdivision** as outlined in both the **Comprehensive Plan** and our **zoning code**.

Response  
3B.48

Public speaker #9: Celia Emory, who lives on Horton Road. She mentioned the development of **Glassbury Court**, which she spoke out against in 2009. She stated that when she first moved to Horton Rd 18 years ago, the natural habitat in Clove Creek was rich in wildlife including trout, turtles, bats, and other animals. She added that the natural habitat is sadly now so depleted and she has been calling the New York State Department of Environmental Conservation (NYSDEC) for help as this **development has had such a deleterious effect on the wildlife in her area**. She asked the Planning Board for to do a follow-up on Glassbury Court and an environmental report on it and stressed **the same concerns for this project** and for the Planning Board to consider a **rigorous review**.

Response  
3A.27,

Public speaker #10: Crystal Ford, who lives on Garrison Woods Rd. She asked about the date of the flood maps in lieu of Climate change and forecast for a warmer world. She also is concerned with **water quality** with septic systems and **horse manure flowing into Clove Creek**. She also spoke about how pesticide use will be monitored and how the horses will impact the wildlife.

Response  
2.90,  
2.85

Public speaker #11: Madeleine McGinney, who lives on East Mountain Rd EMRN for 16 years. She is concerned with traffic issues and asked for exactly where the access to the site and whether it has received approval from the DOT. She also asked if a **traffic study** has been **submitted to the DOT**. She raised safety concerns and mentioned that she was a **victim of a traffic accident** at the intersection of Route 9 and East Mountain Road N. In the summer of 2018, she was re-ended by an 18-wheel truck while waiting to make a left turn onto EMRN from the southbound

lane of Route 9 and how the police told her that accidents happen at that intersection all of the time. She asked that the Planning Board demand the **developer to submit a thorough traffic study for review by the DOT**. She also asked that the Planning Board look at the **two letters** submitted to them from the DOT.

See  
annotations  
on Smith  
letter.

Public speaker # 12: Michelle Smith from the HHLT. Due to time constraints, she summarized the **three main concerns** they raised in the **25-page letter** they submitted on June 18, 2019. The three main concerns deal with **wildlife**, the **definition of open space** that's conserved, and with the **home owners association (HOA)** and the **equestrian facility management on environmental impacts**. With respect to wildlife, she stated that there are **shortcomings with the wildlife studies** that need to be remedied. She stated that there is not sufficient mitigation of impacts on **New York Species of Special Concern**; species that have been declining in population across the state. With respect to definition of Open Space and in consistency with the zoning code, the **preserved open space** in the plan is split into two different segments and are **not contiguous**. They **cut-off a wildlife corridor**, they **constrict another corridor**, and also, the conserved open space includes the 11-acre **equestrian facility**, which is fully developed and **doesn't have any conservation value** and therefore, **should not be included in the conserved open space**. With respect to the HOA, she stressed that we **cannot under-estimate the impacts from the HOA and the equestrian facility management** have on the future environmental impacts. The governance of those organizations **will drive what happens with water, with Clove creek, with Clove creek aquifer**, and if anything happens that causes problems, such as financial difficulties, it will impact their governance, which will have an adverse impact on the environmental impacts of this project and their needs to be mitigation plans for that. She concluded that they are very concerned with the loss of biodiversity, and is asking the Planning Board to ensure the **future of biodiversity for Philipstown**.

Response  
3A.9

Public speaker #11: Scott Silver, Director of the Constitution Marsh Audubon Sanctuary and Visitor Center. He asked, **what are the safeguards** for eliminating or minimizing impacts of the equestrian trail riding in the center, with **40 horses generating one ton of manure a day** having an impact on the surrounding areas. He commended the Planning Board for the Open Space zoning law and asked that the **Planning Board respect both the spirit of the law as well as the letter of the law** when making their decisions. He also stressed the concerns with the loss of biodiversity and the **decisions made are irreversible**.

Response  
3D.5

Public speaker # 12: Hank Osbourne, who works with the **NY/NJ Trail Conference**. They work to protect trails from erosion and overuse, improper use, and protect them from other threats. He asked whether anyone has ever been at the top of a mountain and coming across a beautiful view, but one where it had a **single blemish in the middle of nature**. He said that this development was directly east of one of the most popular parks in the State, The Hudson Highlands State Park, which includes the number one **most popular day hike in North America – Breakneck Ridge**. He mentioned that **currently**, from the top of the hill, there is an amazing view to the east over Fahnstock Park, with nothing but green rolling hills and while there is some development along the Route 9 corridor, all of the **hillsides are completely undisturbed**. He stated that the **view is spectacular** and that you cannot tell where Fahnstock Park begins or ends. The **proposed development would be seen from that viewpoint and every other viewpoint** along Fishkill Ridge and Scofield Ridge. There are a **total of 11 viewpoints** and all of them look directly east across the green hills. The development **would be the only blemish, or scare, from all of those viewpoints**. The houses would be clearly visible from the trails, and while the equestrian facility would take up less of the view than the houses, at 160,000 square feet, it is the **same size as a Walmart Super store**, which are 170,000 square feet. He asked that a genuine view shed analysis be ordered.

Public speaker # 13: Lynn Rogoff, who lives on EMRS. She said that she cannot believe that while the **public gave extensive feedback** to the developers, they did **not give any attention** to these concerns.

Response  
3B.34  
3C.4,  
3B.49

Public speaker # 14: Ray Warner, who lives in Cold Spring. He stated that the **study does not address the effects of 25 houses on the wildlife corridors** in the area. He noted, though, that he was most concerned with the **40-horse equestrian center**, which he stated has pushed the plan way over the top, even if the 25 houses were allowed to remain. He questioned whether the plans adequately address the **effects of the horses on the wildlife**. He questioned whether the horses would be limited to the equestrian center or would be roaming through the



other areas of the property and what effect of that would have and whether the plan would prohibit that. He also stated that the plan does not address the impact the equestrian center would have on neighboring wetlands.

Response  
2.6

Public speaker #15: Judy Farrell, who is on the Philipstown Town Board. She said that she read the plan cover to cover and stated that the applicant does not address the needs of Philipstown / local residents and only addresses the those of NYC residents. She mentioned that putting **40 horses along 25 new homes raises many questions** that must be answered beyond the economic benefits. She also stated that a **stable horse produces about 50-70 pounds of waste per day**, so with **40 horses**, that comes out to **2,800 pounds of waste per day** and asked about how that would be handled.

Response  
2.17

- Public speaker # 16: Carli Fraccarolli, an Advocacy Associate at Scenic Hudson. She stated that her testimony was on behalf of J. Jeffrey Anzevino, Director of Land Use Advocacy at Scenic Hudson. She stated that the Planning Board's review of this first project seeking approval as a **conservation sub-division is precedent-setting**. She noted that the plan is **inconsistent with provisions of a Conservation Subdivision in Philipstown's zoning code**. She added that the applicant's proposed plan would result in **significant environmental impacts**. She said that Scenic Hudson believes that this project **should be designed to be more consistent with the home siting of the applicant's alternative D plan**. This plan relocates 5 houses from the western side of Ulmar pond and clusters them on smaller lots. She stated that the **equestrian facility should be reduced in size and laid out in a more compact arrangement, leaving a wider habitat corridor to the south**. She added, "As proposed, the Hudson Highlands Reserve **does not adequately meet town code requirements for, nor the generally accepted definition of, a conservation subdivision**. The large house lots **sprawl across the entire western half of the property, dividing remaining natural areas into three separate sections**, resulting in forest fragmentation and would not protect the important habitat values found on the site. Scenic Hudson also **disagrees with the applicant's assertion that removing the five homes from around the pond's west side and reducing impervious and disturbed areas is inconsequential**. Any reduction of impervious and disturbed areas is relevant and consequential and it would result in a smaller amount of lower quality edge habitat that would drive away species that rely on these large areas of contiguous forest. **Any losses of habitat on this site are a loss to some of the largest and most intact areas in the Hudson Valley**. This area is **within the Hudson Highlands Significant Biodiversity Area** as well as the **Hudson Highlands Forest Block designation**. A more concerted effort should be made to cluster this development."

Response  
2.33

Public speaker # 17: Mark Tabashnick, who, with his family, live on EMRS. He raised concerns with what the developer's attorney has said, which is that a great deal of study has gone into this project but that he disagreed with that. He spoke about some of the proposals, pertaining especially to the equestrian center, the developer wants to setup a riding stable, a riding school, and a riding camp. They also want to focus their studies on this area of horsemanship called dressage and provided background on what this is, saying that it is a very disciplined and expensive type of horse training and that it is not very well accepted by most horse communities in the U.S. He questioned the developer's implications about the studies done and suggested that a zoning change may be warranted to **separate this from a residential community**.

Response  
4.12

Public speaker # 18: Dr. William Schuester, a Cornwall resident. He said that he was a professional ecologist and has been the Executive Director for 27 years of the non-profit **Blackrock Forest** in the Hudson Highlands. He gave an overview of his background and extensive experience related to managing Blackrock Forest. He said that he was commenting on the DEIS prepared for this project. He pointed to **Philipstown's Conservation subdivision** as being a **laudable concept** and one to help our communities live sustainably into the future while conserving natural resources **if implemented appropriately**. He iterated that to qualify with a **Conservation Subdivision**, the **zoning law states that such projects must preserve contiguous open space, must protect space with the most conservation value** (In other words, those habitats critical for maintaining populations of our native species that are of special conservation concern). He noted his two concerns, which are 1) the **project fails the contiguous conservation criterion** by establishing a barrier, dividing the conserved parts of the project area; and 2) the **environmental studies to-date fail to adequately address a local amphibian and reptile species** of highest conservation concern and the **habitats required by these species**. He recommended solutions to both of these including, first, by accomplishing **surveys of breeding habitats and species** in the seasons necessary, particularly

Response  
2.71

Response  
2.19

Response  
3B.34

Public speaker # 17: Mark Tabashnick, who, with his family, live on EMRS. He raised concerns with what the developer's attorney has said, which is that a great deal of study has gone into this project but that he disagreed with that. He spoke about some of the proposals, pertaining especially to the equestrian center, the developer wants to setup a riding stable, a riding school, and a riding camp. They also want to focus their studies on this area of horsemanship called dressage and provided background on what this is, saying that it is a very disciplined and expensive type of horse training and that it is not very well accepted by most horse communities in the U.S. He questioned the developer's implications about the studies done and suggested that a zoning change may be warranted to **separate this from a residential community**.

**Response 3B.14** vernal pools during the April – May breeding season. He noted that there’s no other way to know what species of concern are on the site. He added that Wood frogs were found on the site and these are obligate vernal pool breeding species, which means that **there must be vernal pools onsite, but no appropriate search to locate and map these habitats has yet been accomplished in the March – April time period when the must be evaluated.**

**Response 3B.22** level conservation concern, like the marbled and spotted salamander and other wetland requiring threatened species like the wood turtle, **are on the site.** He said that the DEIS, as it stands, **does not present appropriate surveys to draw conclusions on this.**

**Response 3B.42** Public speaker # 19: Perry Pitt, who represents the Putnam Highlands Audubon Society. He said that it is there position that the **DEIS wildlife assessment does not include essential and sufficient monitoring procedures.** The field sightings **do not cover the breeding and nesting times for most species and did not cover a long enough period of time to establish the biological diversity these lands support and what species breed and nest onsite.** He noted the **four field visit dates (May 6, July 6, July 9, and August 1, 2015)** He noted that four field study visits is **simply too short of a time span to conduct meaningful monitoring of birds.** He added that the absence of **breeding bird surveys and counts for birds** to determine that that they are not nesting has been **omitted or not done.** He said that they ask the town Planning Board to consider this a conservation project as the first of many, **it must be an environmental model with real seasonal monitoring and assessments with environmental standards** and that any **future projects must also adhere to it before any consideration by the town.**

**Response 3A.28** Public speaker # 20: Karen Erdle, who is a resident of Garrison. She reminded everyone that almost two years ago, Philipstown signed a **Climate Smart Community Agreement** and that just a few weeks ago, the Putnam County unanimously voted in a climate smart community at the county level. The **agenda** of this initiative is to look for **ways to be smart about our climate and our development.** She commended the Planning Board for doing an EIS, but stressed that now is the time to make sure we **do the right thing.** She noted that there are **two bipartisan pieces of legislation in the State,** both of which would strengthen the **protection of local wetlands and streams** because current **NYSDEC, only protects areas that are 12.4 acres or larger** and must be on a DEC-approved map. She added that New York State is the only state without such corridors for small wetlands. She said that more than a million species are at risk. She said that the legislation would protect smaller wetlands, rivers, streams, creeks, lakes, and wildlife. She urged the Planning Board to look at what the **State is doing to protect these areas.** She also urged the Planning Board to understand that they are **setting the precedent for what a conservation subdivision looks like** in the Town of Philipstown, where future developers will use this for future development.

**Response 3A.18** Public speaker # 21: Irene O’Garden, who lives in Garrison. She mentioned how much she knows the property and how much wildlife is around the pond on the site. She therefore urged that the **five houses be removed from the west side of the pond.** She stressed that she **fully supports what the HHLT has raised as recommended actions.** She referred to pages 38-39 of the plan and stated that the critical make-up of the environmental, **critical maintenance of the pond, storm water management, and wastewater** is going to be the **responsibility of the HOA.** She provided a definition of what is an HOA, where people are elected to the board and that it is generally a voluntary thing, but that many homeowners may instead want to hire a property management company. She added that she and her husband donated the 27 acres just next to this development, which then became Clove Creek Preserve and meant to be preserved. She concluded that the **first Conservation Subdivision should serve as a model for what is to come after because someday, we will be absent, but our decisions will live on.**

**Response 2.22** Public speaker # 22: Andy Galler, who is a member of the Conservation Board and lives about as far away from the project as one can remain in the Town of Philipstown, in southern Garrison. He stated that the intent of **SEQR** is very specific and that for the **applicant / developer to work with concerned agencies and the community to balance environmental impacts with the effects** that would happen on the economy and social aspects. He said that looking at the DEIS, he was **exceedingly disappointed.** He asked the planning board to focus tremendously on what he was about to say. He said that the **Planning Board should compare the plan’s scoping document with the DEIS,** and you should find **huge areas of deficiency, all data, questions not asked, and alternative plans cherry-picked** so they are not really realistic. His second point was that he wanted everyone to look at the economics of the project. He noted that the housing market was flat and speculated that it probably will remain flat, due mostly



Response  
2.34

because of the impact of the new U.S. tax code and the deductible of state and local taxes known as SALT. He suggested that there may be problems if all of the houses were not sold and that there aren't the people who would address these problems.

Public speaker # 23: Mickey Danaher. He said that he's not looking to say "no," but how to say, "yes." He's been living in Philipstown for the last 18 years. He said that his **concerns were with the scale and the concentration of the houses and the equestrian center.** He noted that an equestrian center is open to the public, and questioned what was the truly volume of owners and visitors to the site.

Response  
3A.8

Public speaker #25: John Benjamin, who said he was born in Butterfield hospital about 74 years ago and resides in Garrison. He spoke about manure and trout. Though he referred the Planning Board to **Rutgers's University** and a study that the Science Center did, available online, labeled "Horses and Manure – Fact sheet # 306." He said that he was astounded to read that the **average 1,000 pound horse produces 10 – 12 tons of manure a year. With 40 horses, that's between four hundred to four hundred eighty tons of manure a year.** He also noted that the state of New Jersey considers such comparatively large commercial equine centers to be concentrated animal feeding operations (CAFOs). He raised this in the context of pigs and chickens, which are highly regulated but the state to prevent NPK nutrient pollution as well as vermin and pathogen introduction into adjacent aquifers, wetlands, ponds, and /or streams. Admitting that he did not know a great deal about horses, he said that he did know a great deal about trout and brook trout. He added he knew a great deal about clean, clear streams and good fishing, being born and raised in Garrison, fishing as kids, the many brooks in the area. Unfortunately, his two-minute time for speaking ran out to express the remainder of his concerns.

Response  
2.90

Public speaker #26: Adam Herd, who lives on Horton Rd. He stated that he was a **professional real estate developer** and is surprised that a project of this scale does not yet have a traffic study. He reiterated that the State has denied access via Route 9. He said that the addition of **25 more homes and horse trailers on both EMRN and Horton Rd would be very impactful** for what sounds like a commercial facility, with additional traffic on weekends. He stated that the **traffic study must be performed** and that the **access must be determined before proceeding.**

Response  
2.28  
Response  
3B.54

Public speaker # 27: Richard Butensky. He stated that the law says that an applicant may increase the permitted number of dwelling units by use of density bonuses granted at the discretion of the Planning Board. He said that the formula and the density bonus as described shall not be considered an entitlement, as stated in the law. He added that **preserved open space must not result in fragmentation of the open space land in a manner that compromises its conservation value.** It says that in the law. He added that he thinks this plan is compromising the conservation value. He went on to say that the configuration of the open space land and dwellings shall not result in fragmentation of the open space land in a manner that interferes with its proper management and protection of its conservation values. **The final determination as to which land has the most conservation value and should be protected from development by conservation easement shall be made by the Planning Board and not the developer.** He said that **that's in the law.**

Response  
2.44

Public speaker # 28: Adrian Kulas. He said he was representing a family that has been indigenous to the area for 12,000 years. He said he was co-director of the Lenape Center, an indigenous organization. He said that they've been praying on this mountain since 2005. He defined the as elders coming from Oklahoma, Wisconsin, Canada, South Dakota, Arizona, New Mexico, and that they know this is a **place of great sacral significance.** He stressed that this **mountain should be left in peace.** He added that he was part of an effort to bring the people home; the original people. He said that **they don't want this type of disrespect to continue anymore** and that it was time to respect what we have in terms of our responsibility to it and **stop playing around with ideas of short-term thinking and short-term profit** that only enhance the lives of a few. He said that **this is indigenous homeland** and it has **deep spiritual religious significance and it must be left alone.**

Public speaker # 30: Allen Brownstein, who said that he was and his wife moved in 2015 and live in Glassbury Court, less than 1.00 mile from this site. He said that there is **considerable concern from people also living in**

**Glassbury Court.** He noted that the expertise involved from the Planning Board as well as the people participating in the process and was looking forward to a good decision by the Planning Board.

Response 3B.71 Public speaker # 31: David Hammond. He said that on the surface, the development of 39 acres of the total 210 acre site sounds ideal, but that "the devil is in the details." He noted that the 171 acres that would not be developed are on terrain too steep and too wet to be considered. He stated that the proposed plan would effectively split the 210 acres in such a way to preclude the natural and safe passage of any wildlife along this corridor. He noted that this was another hit to Clove Creek at a magnitude that it could ill-afford. He asked for an explanation for the section in the DEIS on page 14 section B.2.C, entitled "Forest Fragmentation Impacts." He said that its concluding statement states that there will be no true fragmentation, though there would be some habitat perforation. He suggested that the use of the adjectives "true" and "some" as quite telling. He asked that Philipstown not lower the bar, and set a poor example in this first test of this enlightened zoning mechanism.

Response 3C.4 Public speaker # 32: Ann Hammond, who said her family lived on EMRS for the last 50+ years. She said that she wrote a letter last year, but nothing from her letter was addressed in the DEIS and nothing was changed in the proposed plan. She also wrote a new 7 page letter, which she said she sent the day earlier. She spoke about the unsustainability of the project with 40 horses living on 11 acres, which will produce a huge amount of waste as well as the 1,000 of pounds of food coming in on large trucks that will have to access the site via EMRN or Horton Road since access via Route 9 has been ruled out by the DOT. She said that there's still a lot that must be considered about this project and she does not like how casually all of the assumptions that it will all be okay, are being made in the document.

Response 3A.4 Public speaker # 33: Steve Loria, myself, residing on EMRN. I first asked that the letter I submitted in February 2018 and that I would like those points re-submitted. I also stated that I was in full agreement with the arguments made by the HHLT. I also highlighted the points made by some of the other people who were speaking during the meeting. I added this proposed project would have a significant negative impact on the aquifer due to the horses and especially the houses around the pond. I also pointed out that there would be significantly increased usage of water from the 25 proposed homes and the 40 horses. I also stressed how dangerous it was from a traffic perspective for those making a left onto EMRN from the southbound lane of Route 9 and how dangerous it was with cars and trucks passing the turning cars on the right side.

Sincerely,

Steven C. Loria

cc:

Kim Conner, Philipstown Planning Board  
Dennis Gagnon, Philipstown Planning Board  
Peter Lewis, Philipstown Planning Board  
Neal Tomann, Philipstown Planning Board  
Neal Zuckerman, Philipstown Planning Board  
David Hardy, Philipstown Planning Board  
Michelle Smith, Hudson Highlands Land Trust

February 11, 2018

Steven Loria  
541 E Mountain Rd N  
Cold Spring, NY 10516

Anthony Merante, Planning Board Chairman  
Philipstown Town Hall  
238 Main Street  
Cold Spring, NY 10516  
RE: Hudson Highlands Reserve – Comments for February 15th 2018 Public Hearing

Dear Chairman Merante and Honorable Board Members:

I'd like to provide my comments on the Hudson Highlands Reserve Conservation Subdivision project, which encompasses the property located below East Mountain and bordered by Route 9, Horton Road, E Mountain Road N, and E Mountain Road S, by developers Horton Road LLC.

I will start with my belief that the Conservation subdivision law is designed to achieve what it was intended to do, based on the Comprehensive Plan (the plan). Therefore, I ask that Philipstown (the town) should do everything in its power using the code to ensure that undesired development, as clearly outlined in the plan, does not occur and set a precedent for future projects.

Response  
2.18

Unfortunately, this project, as it currently exists, does not seem congruous to the law's purposes. The law was enacted to preserve land and resources that would otherwise not be protected in a standard subdivision, and any attempt made to try to fit it into a conservation subdivision is disappointing at best. A standard subdivision would result in only 8 or 9 houses. It appears that the applicant, in order to circumvent the "intention of the law and the plan," bought additional property that was already protected in order to achieve his results.

This project's impacts to what the plan and the law is intended to protect does just the opposite. The plan calls for an astonishing twenty five houses plus an equestrian facility with forty horses with additional buildings. The horse manure waste from the horses as well as a potentially large number of visitors to the facility, has material negative impact on our natural resources and does not preserve land, which are again the intentions of both the plan and the zoning code.

In order to level set, I'd like to outline important points:

- **State law requires that towns adopt zoning laws in accordance with a Comprehensive Plan (Town Law §263)**
- **A Comprehensive Plan provides the "backbone" for the local zoning law**
- **A comprehensive plan is a statement of a community's goals and a conceptual road map for how to achieve them**
- **The 2007 plan identified a number of goals and strategies developed during the process**
- **Two of these goals, which directly support open space conservation and protection of natural resources and lead to our current conservation subdivision provisions, are:**
  - **Goal 1 - Conserve Philipstown's Rural, Historic and River-Community Character**
  - **Goal 7 - Protect Philipstown's Natural Resources**

Strategies for goal 1 include:

- Discourage intensive development in areas not designated for future growth in the Comprehensive Plan, allowing only low-density development, specifically encouraging open space development, also known as “clustering” or “conservation” development

Strategies for goal 1 include:

- Protect Water Quality and Quantity
- Identify critical parcels of land for preservation
  - Create an ongoing identification process
  - Develop ways to accomplish this preservation
  - Preserve habitat and scenic resources through use of open area regulations
- Adoption of a Natural Resource Protection Plan (NRPP)
  - Implement NRPP through land use regulations and other measures
- Chapter 3 / Implementation of the Comprehensive plan, is structured around the types of actions that can be taken to achieve the Town's Goals and Strategies as presented in Chapter Two (Goals and Strategies). Actions are divided into three general categories: Municipal Regulatory Actions (R), Municipal Non-Regulatory Actions (M) and Non-Municipal Actions (N).
- Comprehensive Plan Goal Implementation Action R 2.4 is “Allow open space (cluster) development, with safeguards to ensure that **such developments do not lead to more development than would otherwise occur** and that they preserve open space that the Town wishes to protect.”

Action R 2.4 explanation, as per Chapter 3, is as follows:

*Open space development, also known as cluster or conservation development, is a technique in which the same number of houses that would be allowed on a parcel under a conventional development scenario are arranged on smaller lots, preserving significant amounts of open space. – The use of this technique should be limited to those places where a conventional suburban development is a realistic possibility, but a cluster would produce a better result, with safeguards so that a developer cannot use this technique to build more units than would otherwise be permitted. – The open space to be preserved should be meaningful blocks of contiguous land that has conservation value and that preserves the rural qualities that the community values so much.*

- Comprehensive Plan Goal Implementation Action M 1: is “Prepare and adopt a natural resources plan.”

Action R 2.4 explanation, as per Chapter 3, is summarized as follows:

- *The natural resources plan would identify existing preserved open space and establish proposed open space preservation.*
- *The natural resources plan could then be linked to regulatory changes, such as open space development provisions.*
- Considerable effort and time went into publishing a Natural Resource and Open Space Protection Plan, which is dated October 4, 2007.

The focus on natural resource functions selected by the community is on:

- Ground and Surface Water
- Biodiversity
- Community Character
- Outdoor Recreation

The outcome of this was the **Open Space Index**, which prioritized land based on combined natural Resource functions. In addition, the Conservation Board and a Natural Resource Officer was established. **Under State Law the Conservation Board must review each development application in any Open Space Index area.**

- Current Philipstown zoning code defines **Open Space Overlay District and Conservation Subdivisions.**

The Open Space Overlay District (OSO) defined in §175-18 of Philipstown Code is as follows:

*Purpose: "Special protection of large tracts of land identified as important for conservation by the Town's Open Space Index is necessary to preserve the Town's natural resources and attractive rural quality" – Definition: "The OSO District shall include land shown in the Open Space Index that is located on parcels of 30 acres or more"*

The Conservation Subdivisions in Philipstown Zoning Code is as follows:

*Purpose: Conservation or clustered subdivisions intended to accommodate development in Open Space Overlay, while preserving natural resources and community character.  
Achieved By: Clustering residential units while preserving large tracts of contiguous open space, protected by a conservation easement.*

- As already stated above, the goal of a Conservation Subdivision is to have a better conservation outcome than a Conventional Subdivision. Density bonuses are earned by providing conservation value.
- It is also important to note that Philipstown's zoning code says that protected Open Space is to be contiguous and shall not result in fragmentation.

I have extracted key comments from HHLT's July 5, 2017 letter, which I've included in italicized text below and I fully support their rationale provided in their letters to the Planning Board (dated July 5, 2017 and February 21, 2017) for not supporting the approval of the project as currently proposed and acting as the land trust for holding the property as required by a conservation subdivision.

*Philipstown's 2006 Comprehensive Planning document recommended Municipal Regulatory Action on Conservation Subdivisions, as described in R2.4 (of Chapter 3) below:*

*"R 2.4- Allow open space (cluster) development, with safeguards to ensure that such developments do not lead to more development than would otherwise occur and that they preserve open space that the Town wishes to protect."*

*In our view, the provision quoted above from section 175-20 B(5) should not be ignored, and it is incumbent on the Planning Board to reach an informed decision whether it has a reasonable basis to*

***believe that the Yield Plan would result in substantially fewer units than the Density Formula. If it concludes that it does, then it should take appropriate action to ensure that the purposes of the Zoning Code provisions, including the safeguards against overdevelopment, are given effect. Furthermore, it is to be expected that the applicant will employ whatever measures it can to try and maximize the number of units by using the Density Formula. So for this and the foregoing reasons, we strongly urge the Planning Board to critically assess the unit count using all available methods in the Zoning Code, especially the use of the Yield Plan method.***

I agree with HHLT's point they raised in their July 5 letter, that the Planning Board ask the applicant to present to the Board a plan for a conventional subdivision detailing as closely as possible what would be required for a conventional subdivision, and a revision of its June 1st conservation subdivision plan that is responsive to the concerns noted in HHLT's letter. As HHLT stated, the Planning Board, with the benefit of advice from its own professional consultants, could then make a definitive decision on whether or not it has the requisite basis for requiring a Yield Plan pursuant to Section 175-20 B(5).

As also noted in HHLT's letter, with respect to Fragmentation and Definition of Open Space, Zoning Code Section 175-19 B provides an overview of Conservation Subdivisions, including the following wording:

***"Conservation subdivision results in the preservation of contiguous open space and important environmental resources, while allowing compact development . . . ,"***

HHLT also stated the following:

*The June 1st Plan shows segmented open space. The separate segments include one nearest Route 9, cut off from the rest of the forest cover by the proposed roads, and the housing units wrapping around Ulmar Pond. The spreading out of development across this south to north divide of the property, beginning at the first hairpin turn from the Route 9 entry road and ending at the last house at the southwest corner of the pond, does not seem consistent with the concept of "compact development."*

Further, in the zoning code, Section 175-21 A(3)(b) states that:

***"The configuration of the open space land and dwellings shall not result in fragmentation of the open space land in a manner that interferes with its proper management and protection of its conservation values."***

*We believe that the fragmentation mentioned above, particularly that associated with the houses wrapped around the pond, does interfere with conservation values, as mentioned previously in our February 21st letter to the Planning Board. In addition to fragmentation of forest cover, the number and size of houses, and road cover around the pond is likely to be detrimental to the water resources on the property and surrounding area as identified in the Conservation Analysis and Findings.*

*In addition, the fragmentation of open space will make easement monitoring and enforcement more challenging.*

*Definition of Open Space: We continue to be concerned that the applicant's definition of open space includes space with structures.*

*Open Space is defined in the Zoning Code as: "An area of land not developed with structures."*

*A Structure is defined in the Zoning Code as: "A static construction of building materials affixed to the ground, such as a building, dam, display stand, gasoline pump, installed mobile home or trailer, reviewing*

*stand, shed, sign, stadium, storage bin, wall, fence, swimming pool, tennis court, road, driveway, sidewalk, or parking lot."*

Therefore, I must conclude that **the proposal does not comply with the zoning code.**

As also noted in HHLT's letter, with respect to the impact of the Equestrian Facility, HHLT stated:

*While there has been much discussion around the legal status of the equestrian facility, our concern is primarily how this operation impacts conservation values of the conserved open space. Zoning Code 175-21 A states that:*

***"Any development permitted in connection with the setting aside of open space land shall not compromise the conservation value of such open space land as established in the conservation analysis"***

*Given the large number of horses involved in the equestrian operation, and the size of the associated infrastructure, we have significant concerns about the impact of this operation on the conservation values of the protected open space. This includes the impact on contiguous forest cover, wildlife corridors and the numerous water resources impacted by this development (Clove Creek, Clove Creek Aquifer, Ulmar Pond), all of which are documented in the Conservation Analysis and summary Conservation Findings.*

Finally, with respect to what HHLT raised in the July 5, 2017 letter, they made it clear that the current plan would not allow them to hold the conservation easements required for Conservation Subdivisions under Philipstown's Zoning Code. They stated:

*In order for us to accept such a regulatory easement, we must determine, after undertaking a due diligence examination and applying our own analysis, that:*

- 1. The steps defined in the Zoning Code and the vision documented in the Comprehensive Plan for Conservation Subdivisions are followed, and*
- 2. The easement we are taking on truly has conservation value and is one that we have the resources to monitor and enforce in perpetuity. For the reasons documented in Sections A) through D) above, it is unlikely that the June 1st plans as presented to the Planning Board would enable us to make that determination.*

I fully agree with the conclusions reached by the HHLT in their July 5, 2017 letter, that the main points that need to be addressed for the proposal to be approved as a conservation easement are the following:

- The developer is not able to use the Conservation Subdivision to build more units than allowed under a Conventional Subdivision (e.g. require a "Yield Plan" calculation or approximation),*
- Remove the housing lots wrapped around the pond to avoid the fragmentation of open space, and create a conservation outcome protecting the valuable natural resources identified in the Conservation Analysis and summary Findings,*
- Adhere to the definition of Open Space in the Zoning Code, and*
- Prove that the equestrian operations do not adversely impact the valuable natural resources identified in the Conservation Analysis and summary Findings*

HHLT also noted in their July 5, 2017 letter:

- There are several significant adverse environmental impacts of this development as defined by the June 1st plans, including:*

- *Impact of the development on key water sources (Ulmar Pond, the Clove Creek Aquifer, Clove Creek),*
- *Fragmentation of forest cover and impact on wildlife corridors, and*
- *Impact of significant equestrian operations on water, soils, and wildlife corridors.*

I, too, concur with HHLT's conclusion that unless these plans are revised to eliminate these adverse impacts, under SEQ RA, a full Environmental Impact Statement would be required.

I believe the property does not qualify as a conservation subdivision. According to the Philipstown zoning code, the dwellings in a conservation subdivision "shall not result in fragmentation of the open space." Because of zoning restrictions on rural land and open space, if the project were developed as a typical suburban subdivision, it would only have eight or nine houses and we would have a better conservation outcome if it was developed as a conventional subdivision.

Michelle Smith of HHLT rightly warned Planning Board members against setting a bad precedent, noting that other developers, inspired by this project, have similar proposals in the pipeline.

In closing, this is the first project to seek Philipstown Planning Board approval as a "conservation subdivision" under the town's 2011 zoning code and it is imperative to the town that this is done right and that it is compatible with the spirit of the 2007 Comprehensive Plan and that it does not set precedent for unwanted development, resulting in future loss of Open Space Index properties.

Sincerely,

Steven C. Loria

cc:

Neal Zuckerman, Philipstown Planning Board  
Kim Conner, Philipstown Planning Board  
Dennis Gagnon, Philipstown Planning Board  
David Hardy, Philipstown Planning Board  
Peter Lewis, Philipstown Planning Board  
Neal Tomann, Planning Board  
Richard Shea, Philipstown Town Supervisor  
Nancy Montgomery, Philipstown Board  
John Van Tassel, Philipstown Board  
Robert Flaherty, Philipstown Board  
Michael Leonard, Philipstown Board  
Michelle Smith, Hudson Highlands Land Trust



**Supplemental Submission to Philipstown Planning Board**  
**By**  
**Philipstown Conservation Board**  
**Regarding**  
**Hudson Highlands Reserve**

July 8, 2019

Philipstown Planning Board  
PO Box 155  
238 Main Street  
Cold Spring,  
New York 10516

Re: Hudson Highlands Reserve

Dear Chairman Merante and Members of the Philipstown Planning Board:

This is a Supplemental Submission to the Philipstown Planning Board made by the Philipstown Conservation Board with respect to the Draft Environmental Impact Statement (the “DEIS”) filed in regard to Hudson Highlands Reserve (“HHR”). It is intended to supplement the Conservation Board’s primary submission, which is a bullet-point summary that is also being filed today.

The July 19, 2018 Final Scope document approved by the Planning Board on July 19, 2018 identified four different primary areas to be addressed by the DEIS. These four areas were identified as follows:

- 1. Water Resources (Surface Water; Groundwater; and Floodway and Wetlands)
- 2. Vegetation and Wildlife
- 3. Zoning & Land Use; and
- 4. Community Character

This Supplemental Submission focuses on the issues of (i) Water Resources and (ii) Vegetation and Wildlife, both of which are issues that the Conservation Board believes are properly included within its area of responsibility.

HHR is a proposed 210-acre development in Philipstown, New York. If approved and built, it would be the first Conservation Subdivision in Philipstown. The evaluation and eventual approval or disapproval of the HHR proposal will set important precedents for all future Conservation Subdivision proposals.

The HHR proposal contemplates that roughly 50 of the 210 acres within the development will be used for construction of 25 luxury homes and a 40-horse Equestrian Center. The remaining 159.8 acres, most of which is undevelopable due to the steepness of the terrain, is described in the DEIS as being “undisturbed open space” and is proposed to be left in an undeveloped state, subject to a Conservation Easement, and is referred to in these Comments as the “Conserved Land”. The Conservation Easement also is proposed to cover a commercial Equestrian Center, which will have no undeveloped land. Accordingly, the term “Conserved Land” as used in this Supplemental Submission does not refer to or include the Equestrian Center. As noted in our other submission to the Planning Board, we do not believe that the Equestrian Center should even be considered for inclusion within the Conservation Easement, for the reasons stated in our primary submission.

The Conserved Land is described as serving several important and worthwhile functions:

**“It will protect important habitat and wildlife corridors and allow migration and movement of various animals. It will provide a block of undisturbed contiguous forest that will support the functions of the nearby unfragmented forest within Fahnestock State Park. It will preserve and protect Ulmar Pond, as well as a 140-foot buffer around it. It will also preserve and protect a wetland and bifurcated stream system, along with extensive buffers. The Conservation Easement will also include and preserve the area occupied by the historic stonewall-lined roadway as a cultural and recreational resource.” (DEIS, pp. 39-40) [The reference to “contiguous forest” appears to refer to forest within the Conserved Land. None of the Conserved Land is contiguous to Fahnestock State Park.]**

Plans for HHR call for 10 of the 40 horses at the Equestrian Center to be owned by HHR and available to the public for riding, training, and similar use, at an unstated

but presumably market-rate commercial fee. The fact that the public will be able to pay commercial rates in order to use the Equestrian Center is the primary public benefit identified by HHR in its Draft Environmental Impact Statement (the "DEIS"). The DEIS implies that there are not other equestrian centers available for public use, although such centers appear to be available elsewhere in Putnam and Dutchess Counties.

The remaining 30 horses will be owned and stabled at the Equestrian Center by individuals who have purchased one of the 25 lots in HHR and built a house there. There is no projection of what the fees charged for public use will be or how such fees compare to those charged by other equestrian centers. Appendix G to the DEIS, dealing with the Equestrian Center, appears to suggest that public use of the Equestrian Center is necessary in order to make it economically viable.

Response 3A.9  
Response 3A.11

A significant part of the DEIS relates to the Equestrian Center, primarily because the 40 horses that will be stabled there will produce approximately one million pounds per year of environmentally damaging horse waste, all of which must be contained and then trucked off-site weekly for disposal. Although not described in the DEIS, production of the one million pounds of horse waste that must be removed every year will presumably require the annual trucking into the Equestrian Center of an equivalent one million pounds of feed and straw bedding. Any failure to contain and remove the horse waste properly would risk dangerously contaminating Water Resources. In addition, riding horses on the approximately 160 acres of Conserved Land, which the DEIS says will not occur, would rapidly destroy Vegetation and Wildlife.

### Summary of Conclusions

**HHR's Proposal to Protect Water Resources, Vegetation, & Wildlife Creates an Inherent Conflict of Interest that Could Endanger those Natural Resources:** The DEIS describes an elaborate system of operations and internal self-governance by a Homeowners Association (the "HOA"). All residents of HHR will be required to be members of the HOA, and the board of directors of the HOA will consist of three residents of HHR. The HOA will be charged with determining the amount of annual maintenance charges required to be assessed against and collected from residents, in order to carry out all of the critical, government-like functions and duties assigned to the HOA. The amount of projected annual maintenance charges per resident was not quantified in the DEIS, but it appears likely to be high, given the extensive maintenance and upkeep functions assigned to the HOA.

The HOA also will be charged with managing the Conserved Land that is subject to the Conservation Easement, setting and enforcing all of the rules designed to protect the Conserved Land against overuse or damage by residents - their neighbors - and raising the revenue to successfully maintain and operate the complex systems required to protect groundwater and streams from pollution. As with any HOA, there is an inherent conflict of interest present within the HHR HOA. It is exacerbated in the HHR proposal by the complexity and number of quasi-governmental functions the HOA must assume.

With regard to protection of Water Resources, Vegetation, and Wildlife, for example, it is clearly in the enlightened self-interest of the residents and the members of the HOA to set maintenance charges at whatever rate is required, in order to properly protect all Water Resources, Vegetation, and Wildlife that are at risk and to also carry out all of the other wide variety of functions entrusted to the HOA. Those same residents, however, are the ones who must actually pay the monthly maintenance charges.

Paying any subdivision's monthly maintenance charges is similar to paying taxes: every taxpayer/homeowner wants the benefits that come from spending either tax dollars or HOA maintenance charges, but those same taxpayers/homeowners are often unwilling to vote for the level of taxes/monthly charges required to fund such benefits, and will try to avoid payment of taxes/monthly charges unless there is a significant and immediate benefit to doing so, as well as a significant and immediate sanction for failure to do so. The members of the board of directors of the HOA will be asked every year to determine the annual maintenance charges to be assessed against all residents of HHR, including themselves. There could not be a more clear-cut conflict of interest.

Likewise, protection of the Conserved Land conflicts with what will be an understandably strong desire of the residents of HHR to use the Conserved Land near their homes for whatever recreational purposes attractive to each of them, regardless of the rules. All residents of HHR will be aware that, immediately adjacent to their one-acre lots, there exists an undeveloped park-like 160 acre expanse of forest, streams, pools, wildlife, and similar features in the Conserved Land. Residents will be aware that the public is prohibited from using the Conserved Land for any purpose whatsoever; that access to, and use of, the Conserved Land is reserved exclusively for residents of HHR; and that HHR actually owns the Conserved Land.

Response  
2.36

It defies both experience and human nature to believe that residents will not wish to make full use of the Conserved Land for recreational purposes. There are no public parks or recreation areas within walking distance of HHR; while Philipstown has many such areas, residents of HHR will have to drive in order to reach any of them. The 160 acres of Conserved Land, however, will be within immediate walking distance to every house located within HHR. Indeed, access to such lands will presumably be a major selling point by the developer, so the argument that the residents either will not wish to use such lands or will do so only sparingly seems improbable. People who purchase luxury houses anywhere within the Hudson Highlands expect, depending upon their particular interests, to be able to walk; bike; jog; run; ride horses; hunt; sunbathe; engage in outdoor photography; cookout; barbeque; play ball and other sports; fish; and engage in all normal outdoor recreational pursuits. The temptation to do so in the Conserved Land will be overwhelming, notwithstanding rules purporting to limit such use.

Response  
2.37

As with the conflict inherent in setting and collecting maintenance charges, there will be a similar conflict with respect to use of the Conserved Land. Residents will have an understandable desire to use the Conserved Land, all of which will be private; reserved exclusively for their use; and supported by the maintenance charges that they pay. At the same time, however, the HOA board members will have a duty to conserve and protect such lands against all but minimal human use, not to mention protection against any incursion by horses. Such conflict between the natural inclination of residents and the duties of the HOA board has the potential to become irreconcilable.

**Risks to Water Resources:** With respect to Water Resources, HHR poses serious risks to both groundwater and surface water contained within the area encompassed by HHR, as well as to surrounding groundwater, the watershed for Clove Creek, and the Hudson River itself. **The risk results primarily, but not exclusively, from the fact that the Equestrian Center will generate approximately one million pounds of horse waste per year** (DEIS, Appendix "N": September 21, 2017 report of B. Laing, Environmental Consultant for HHR; 65 lbs of estimated stall waste per horse per day x 40 horses x 365 days = 949,000 lbs. /year).

Response  
3A.11

Runoff from all of such waste, including feces, urine, and soiled stall bedding material, must be prevented from leaching into the soil or being washed into streams. While HHR contemplates adoption of an extensive Manure Management Program, that program must be fully funded from operations of the Equestrian Center; executed perfectly, first by employees of the Equestrian Center, and then by a hired contractor;

and rigorously followed, **in perpetuity**, in order to avoid substantial contamination of both groundwater and surface water.

In addition, the project has a large pond (Ulmar Pond) and a number of intermittent streams, vernal ponds, and wetlands. The DEIS calls for the protection of all of such water resources and outlines how that is intended to be achieved, including through the development and adoption of a lake management plan for Ulmar Pond. There is, however, often a large gap between the predictions of a developer and what actually happens on the property in later years. In the case of HHR, all the developer's comprehensive plans for management and protection of Water Resources must be funded, executed and maintained by the HOA. All of the surface water and groundwater is potentially at risk if the water protection and management plans outlined in the DEIS are not fully funded, properly implemented, and permanently enforced for as long as the Equestrian Center remains in operation.

**AS A RESULT OF THE ISSUES DESCRIBED ABOVE, THE PHILIPSTOWN CONSERVATION BOARD BELIEVES THAT THE RISK POSED BY HHR TO WATER RESOURCES, INCLUDING ULMAR POND, CLOVE CREEK, AND THE HUDSON RIVER, IS VERY HIGH.**

**Risks to Vegetation and Wildlife:** Approximately 160 acres of undeveloped Conserved Land will be included within the Conservation Easement. The DEIS identifies an extensive list of flora and fauna that can be found at the current time within the Conserved Land, and presents an optimistic view of the beneficial impact that the Conservation Easement will have upon all of such vegetation and wildlife. At the same time, the DEIS notes the risk posed to the Conserved Land by human usage:

**“The introduction of human activity can have a detrimental effect on wildlife. It can displace plants and animals from their natural environment. At its worst, it can cause the extirpation of flora and fauna that are necessary to the environment. In order to preserve the environment, destruction of wildlife, especially threatened or endangered species, should be avoided.” (DEIS, p. 75)**

Response  
2.62

How destructive the impact of human usage of the Conserved Land will be is unknowable at the present time. The two primary variables that will determine how destructive human usage will be are those of (i) the frequency and intensity of actual human use of the Conserved Land by residents of HRR, irrespective of subdivision



rules; and (ii) domesticated animal (primarily horses) use of the Conserved Land, irrespective of subdivision rules.

Response  
2.59

With respect to human usage, the Conserved Land will be closed to use by the public and will be available only for use by the homeowners in HHR. That restriction will limit the number of individuals who will be using the land, but it is not clear what uses the residents of HHR will make of the land; how such uses will be regulated; and how aggressively the HOA will enforce protective rules for the Conserved Land. Absent strict guidelines that are actually enforced, use of the Conserved Lands by HHR residents will be likely to degrade them both as a habitat for wildlife and as an “undeveloped contiguous forest.” It is a certainty that the proximity of 160 acres of undeveloped land to the 25 homes that will be built will introduce a permanent population, at least some of the members of which will desire to engage in outdoor recreational activities near where they live, i.e., in the Conserved Land.

Response  
2.60

Horses pose a danger at least as great to the Conserved Land as do humans, both because of the habitat destruction that would be caused by riding and also because of horse waste that would be left in the Conserved Land anytime that horses intrude there. The DEIS implicitly recognizes this fact by stating that riding horses anywhere within HHR other than at the Equestrian Center will be prohibited. The DEIS and its accompanying appendices contain totally inconsistent and contradictory statements, however, with respect to the issue of riding horses outside of the Equestrian Center. Those internal contradictions make all the more important the question of who will monitor and enforce the seeming prohibition against riding horses outside of the Equestrian Center. Some or all of the members of the board of directors of the HOA will be horse owners themselves, and Philipstown is being asked to rely on them to insure that horses do not destroy the wildlife, vegetation, and habitat within the Conserved Land. Whether the HOA does so or not will determine the fate of the Conserved Land.

**AS A RESULT OF THE FOREGOING, THE CONSERVATION BOARD BELIEVES THAT THE RISK POSED BY HHR TO VEGETATION AND WILDLIFE IS VERY HIGH.**

### Recommendations

The Conservation Board recommends that HHR be approved by the Planning Board, but ONLY subject the following changes, all of which should be added to the appropriate documents, and as to all of which any modifications or deletions should be

explicitly prohibited, without written approval of the holder of the Conservation Easement and the Town of Philipstown. **ABSENT ADOPTION BY THE DEVELOPER OF THE RECOMMENDATIONS BELOW, THE CONSERVATION BOARD STRONGLY RECOMMENDS THAT THE PLANNING BOARD DISAPPROVE HRR IN ITS ENTIRETY.**

### **1. Public Board Members**

In order to address the structural conflict of interest inherent within the proposed HOA, the HOA should have a five-person board of directors, consisting of three members elected by residents of HHR and two public members, collectively nominated by Open Spaces Institute; Riverkeeper; Hudson Highlands Land Trust; Constitution Marsh Audubon Center and Sanctuary; Scenic Hudson; and the Philipstown Garden Club. If not all of the six entities listed in the prior sentence wish to participate in the nomination process, the remaining entities should do so. The two public members should be approved and appointed by the Town of Philipstown. Such public members shall be full voting members of the HOA, fully indemnified as are the other board members, and should be authorized to report to the holder of the Conservation Easement, the Town of Philipstown, and the CB any issues or concerns they may wish to raise with respect to HHR. The bylaws of the HOA should be modified to require that at least one public member be present at any meeting of the board in order for it to have a quorum and take any action.

Response  
2.38

An HOA does not typically have or need public members, and if this were a conventional subdivision, without an Equestrian Center, there would be no need for public members. The potential for environmental damage to Water Resources, Vegetation, and Wildlife is so great, however, and the public interest is so strongly implicated, that public members of this HOA board are critical. Public corporations in the United States routinely have independent board members, with no conflicts of interest, and so should the HOA for HRR. The CB additionally recommends that public members be mandatory not only for HHR, but also for all future Conservation Subdivisions.

### **2. Certified Land Trust**

In view of the critical importance of proper administration and enforcement of the Conservation Easement, only a land trust certified by the Land Trust Alliance Accreditation Commission should be accepted by the Town of Philipstown as the holder of the Conservation Easement. As indicated on its website, "The Land Trust Accreditation Commission was incorporated in April 2006 as an independent program



Response  
2.49

of the Land Trust Alliance to operate an innovative program to build and recognize strong land trusts, foster public confidence in land conservation and help ensure the long-term protection of land.” It is the gold standard for land trust accreditation, and the citizens of Philipstown are entitled to nothing less. If a land trust accredited by the Land Trust Accreditation Commission willing to hold the Conservation Easement cannot be found, that will be a red flag for the Town of Philipstown that something is seriously wrong with the proposed development.

### **3. “Trust but Verify”: Testing & Inspection for Water Resources, Vegetation & Wildlife**

It is impossible to know without regular monitoring and testing whether the protections proposed in the DEIS for Water Resources, Vegetation and Wildlife are being implemented properly or are working as contemplated in the DEIS. Philipstown should not be required to pay for such testing, which would not be required, but for the presence of the Equestrian Center and the waste generated by the horses that will be stabled there. The developer should pay for such testing, and, as and when the developer has no lots left to sell in HHR, the HOA should pay for it. Accordingly, the CB recommends the following testing procedures and schedule.

Response  
3A.12

- **Water Resources:** an independent, certified water-testing firm selected by the Town of Philipstown should test Ulmar Pond, representative vernal ponds, Clove Creek, and any other sites selected by it or the Town of Philipstown, at the expense of HHR, and deliver reports simultaneously to HHR and the Town of Philipstown. Such testing should be done monthly. At the option of the Town of Philipstown, such testing may also be required after any rainstorm producing more than one inch of rain in six hours or less.

Response  
2.50

- **Vegetation & Wildlife:** an independent, certified wildlife and habitat management firm selected by the Town of Philipstown should inspect the Conserved Land monthly to determine the degree to which vegetation and wildlife and their habitats are being disturbed, either by construction; human activity; horses being brought onto the Conserved Land; or any other activities. Such inspections and reports should be under the same terms and schedule proposed above for water testing.

Response  
3A.13

- **Baseline Testing:** in order to provide baseline data, both comprehensive water testing and a full field inspection of the Conserved Lands should be undertaken within 30 days of any approval of HHR by the Planning Board and should be done monthly thereafter, in order to provide a meaningful pre-development record of water quality, habitat quality, and the presence or absence of wildlife.

Absent such baselines, it will not be possible to fully evaluate the implications of later testing and inspection.

#### **4. Two Critical Wildlife Corridors Should be Widened**

Two of the most critical wildlife corridors within HHR are, as currently proposed, either unacceptably constricted and/or blocked. Modern wildlife science has established that wildlife does not naturally use narrow, slot-like corridors, particularly when the corridors are adjacent to human settlement or commercial livestock. Two critical proposed HHR corridors should be opened and/or widened. The first corridor runs between Clove Creek and Ulmar Pond. The five houses on the West Side of Ulmar Pond should be moved to other developable land, in order to open that corridor. Likewise, the Equestrian Center, as proposed, impinges significantly on the corridor from the eastern side of HHR to Ulmar Pond, particularly given the presence of 40 horses within it. The Equestrian Center should be reconfigured so as to widen that corridor materially.

Response  
3B.21

#### **5. General Rule (ii) Should be Changed and Made Non-Amendable**

Appendix J to the DEIS contains, among other documents, the General Rules and Regulations of Hudson Highland Reserve Homeowners Association (the "General Rules"). Section 1 of the General Rules contain 35 separate rules applicable to homeowners, covering issues such as the parking of cars; license plates; dogs; cats; signs; fences; gates; maintenance charges; nuisances; and a variety of other issues.

Response  
2.39

The single most important rule of the 35 rules specified is Rule (ii), which is the 35th, last, and least conspicuous of all of the rules. It states as follows: "No horses or horseback riding shall be permitted anywhere in the Community except within the Equestrian Center." While the rule is clear and in keeping with representations of the developer, the importance of it to environmental protection is such that it should have been the first of all of the rules, rather than the last. Placing this critical rule last in a long list of rules, most of which are trivial in comparison, is inappropriate. Accordingly, Rule (ii) should become the first Rule (i.e., Rule (a)), and, in order to emphasize its importance and avoid any contention by any party that they were unaware of the rule, it should be printed in capital letters, in bold-face type.

In addition, Section 6 (16 ) of the Bylaws of the HOA allows the board of directors of the HOA to "amend, modify or repeal" any of the General Rules. Accordingly, current Rule (ii), which should become Rule (a), should include the following sentence: "This

Response  
2.40

rule (a) may not be amended, modified, or repealed without written consent of the holder of the Conservation Easement and the Town of Philipstown.” Likewise, Section 6 (16) of the bylaws of the HOA, which explicitly authorizes amendment, modification, or repeal of any rules, should add a statement prohibiting any amendment, modification, or repeal of current Rule (ii), without the written consent of the holder of the Conservation Easement and of the Town of Philipstown.

#### **6. The Easement Approving Horse Riding Outside of the Equestrian Center Explicitly Violates the Proposed Conservation Easement and Must be Changed**

Response  
2.41

Appendix “T” to the DEIS is the Declaration of Covenants, Restrictions, Easements, Charges and Liens (the “Declaration”), which addresses the issues suggested by its title. Contrary to the intent stated elsewhere to prohibit riding horses anywhere in HHR other than within the Equestrian Center, Article V, Section 2 (iii) of the Declaration explicitly grants an easement approving horse riding outside of the Equestrian Center: “Right-of-way for ingress and egress and/or use and enjoyment by horseback riders who are instructors, students, patrons or invitees of the Equestrian Center, over and on the interior roadways in the Community and over and on the Historic Roadway.”

That provision explicitly approves the use of horses outside of the Equestrian Center, rather than prohibiting such usage, and it significantly undermines the credibility of the developer’s assurances to the contrary. Once horses are permitted to be ridden “over and on the interior roadways in the Community and over and on the Historic Roadway,” it is inevitable that they will begin to be ridden everywhere throughout the Conserved Land. The Declaration must be revised to remove the proposed easement allowing horses to be ridden outside of the Equestrian Center, in conformity to the terms of the Conservation Easement. The Declaration’s grant of an easement allowing horseback riding should be replaced by a prohibition, and the prohibition should be printed in capital letters and in bold-face type.

#### **7. Contingency Planning for Equestrian Center: Quarterly and Annual Financial Statements from the Equestrian Center**

It is of critical importance that the operations of the Equestrian Center be financially successful, since management and employees of the Equestrian Center are responsible for implementing the Manure Management Plan. There are, however, no

**Response 2.72** contingency plans presented anywhere in the DEIS should the income of the Equestrian Center prove inadequate to support, for example, thorough and continuous implementation of the Manure Maintenance Plan. Will Horton Road LLC backstop costs and expenses of the Equestrian Center? If so, for how long? Will the HOA provide such backstop? The importance of flawless execution of waste control and removal is such that HHR should not be approved without some contingency backstop from a responsible third party, in the event the operations of the Equestrian are less successful than projected in the DEIS.

**Response 2.73** In addition, the governing documents for HHR should require that monthly, quarterly, and annual financial statements for the Equestrian Center should be provided to the board of the HOA, so that the board can confirm that operations are generating sufficient revenue for the Equestrian Center to properly perform all of its functions, including the requirements of the Manure Management Program.

**Response 2.74** In addition, a funding plan for recurring capital expenditures relating to pollution prevention at the Equestrian Center should be presented annually to the board of the HOA. For example, the DEIS states that the engineered floors of the 40 horse stalls will need to be rebuilt at least once every ten years, and perhaps more often, in order to function properly and prevent horse waste from leaching into groundwater. What will be the amount of such expenditures? What other, similar capital improvements or replacements will be required? How will such expenditures be funded?

### **8. The Remedies Against the Developer for Breach of the Conservation Easement are Illusory and Must be Strengthened**

Section 6 of the Conservation Easement is entitled, “Grantee’s Remedies for Violation of Easement.” It deals with the rights of the holder of the Conservation Easement (the “Grantee”) against the developer, Horton Road LLC (the “Grantor”) for any and all violations of the terms of the Conservation Easement. As such, it is critically important to the protection of the Conserved Land. As drafted, the rights and remedies are more illusory than real, and the section must be revised to give the Grantee and the Town of Philipstown meaningful remedies with which to enforce the Conservation Easement, in order to adequately protect Water Resources, Vegetation, and Wildlife.

Section 6.2 of the Conservation Easement says that the Grantee may bring an action for injunctive relief, but does not say against whom such action may be brought. This section should state clearly that any such action may be brought against the

Response  
2.52

Grantor at any time until it no longer owns any lots for sale within HHR and, thereafter, against the HOA.

Section 6.3 of the Conservation Easement says that the Grantee may recover damages for violation of the terms of the Conservation Easement or injury to any of the conservation purposes that are protected by its terms, but does not say against whom such damages may be recovered. This section should state clearly that damages may be recovered against the developer at any time until it no longer owns any lots for sale within HHR and, thereafter, against the HOA.

Response  
2.53

Section 6.6 of the Conservation Easement deals with costs of enforcement, including both attorney's fees and any costs of restoration of the Conserved Land. It states that any of such fees and costs shall be borne by the Grantor, if the Grantee prevails in a judicial action. The Grantor, however, is an LLC, which means "Limited Liability Company." One of the purposes of an LLC is to protect the beneficial owners of the LLC from any personal liability. This means that, if the Grantee and/or the Town of Philipstown (pursuant to its third party enforcement rights under Section 6.8 of the Conservation Easement) obtain a judgment against the Grantor for violations of the Conservation Easement, the Grantor may or may not have the funds with which to pay such judgment.

In addition, Section 10.2 of the Conservation Easement explicitly disclaims personal liability for any beneficial owner, confirming that the Easement was drafted with the specific purpose and intent of limiting the ability of the Grantee and the Town of Philipstown to assert any claims against the beneficial owners, even if the Grantor is unable to pay a judgment or respond to other orders of a court. It is not acceptable for the beneficial owners to reap the profits from development of HHR and have the ability to walk away from its liabilities.

Accordingly, the beneficial owner or owners of Horton Road LLC should provide an unconditional guarantee to the Grantee and to the Town of Philipstown, covering any and all obligations of the Grantor under the Conservation Easement, including but not limited to fees, costs, expenses and damages, in the event Horton Road LLC does not pay any sums awarded pursuant to a final, non-appealable judgment against it, in whole or in part, or fails to take any action required of it under any section or provision of the Conservation Easement. Promises by any LLC, including Horton Road LLC, are illusory without either such a personal guaranty, a letter of credit, or another, functionally similar, alternative.



Of course, if the system works as perfectly and flawlessly as the DEIS suggests that it will, the beneficial owners will never have to pay any costs whatsoever from their personal funds. If, however, the beneficial owners are not willing to provide personal guarantees to backstop the promises that they are making, their unwillingness to do so will be a red-flag for the Town of Philipstown that it needs to view all of the promises and undertakings in the DEIS with a high degree of scepticism.

**9. The “Use of Property” Section of the Conservation Easement is Unacceptably Open-Ended and Does not Prohibit Horseback Riding in the Conserved Land**

Response  
2.63

Section 4.1 of the Conservation Easement is entitled “Use of Property.” It is intended to describe what uses may be made of the approximately 160 acres of Conserved Land, not including the Equestrian Center. It lists eight permitted uses as being “included but not limited to.” The section should provide that those eight activities are the only permitted uses, and that future permitted uses may be added upon request of the Grantor or the HOA, subject to written agreement by the Grantee and the Town of Philipstown. Such request for approval should provide the Grantee and the Town of Philipstown 90 days within which to respond. In addition, although it is garbled, the last sentence of Section 4.2 of the Conservation Easement states that horseback riding shall not be permitted outside of the Equestrian Center; that prohibition, clearly written, should be added to Section 4.1 of the Conservation Easement as well.

Respectfully submitted by the Philipstown Conservation Board, July 8, 2019.

Mark Galezo, Chair  
Lew Kingsley  
Robert Repetto  
D.J. (Jan) Baker  
Anthony Deos (alternate)

Andy Galler  
M.J. Martin  
Robert Repetto  
Krystal Ford  
Max Garfinkle, Natural Resource Officer &  
Wetlands Inspector

1. 2. 3.

1. The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the integrity of the financial system and for the ability to detect and prevent fraud. The text outlines the various methods used to collect and analyze data, including the use of statistical models and computerized databases. It also discusses the challenges associated with data collection, such as the need for standardized procedures and the potential for data manipulation.

2. The second part of the document focuses on the development of a robust legal framework to support the financial system. It examines the current state of the law and identifies areas where reforms are needed. The text proposes a series of measures to strengthen the legal system, including the establishment of a judicial council to oversee the judiciary and the creation of a new court system to handle financial disputes. It also discusses the need for greater transparency and accountability in the legal process.

3. The third part of the document addresses the issue of public administration and the role of the state in the economy. It argues that the state should play a more active role in regulating the economy and providing public services. The text proposes a series of reforms to improve the efficiency of the public sector, including the privatization of state-owned enterprises and the introduction of performance-based contracts for public officials. It also discusses the need for greater transparency and accountability in the public sector.

4. The fourth part of the document discusses the role of the media in the financial system. It argues that the media should play a more active role in monitoring the activities of financial institutions and reporting on any potential problems. The text proposes a series of measures to strengthen the media, including the establishment of a media council to oversee the media and the creation of a new media law to protect the freedom of the press. It also discusses the need for greater transparency and accountability in the media industry.

5. The fifth part of the document discusses the role of the judiciary in the financial system. It argues that the judiciary should play a more active role in resolving financial disputes and enforcing the law. The text proposes a series of measures to strengthen the judiciary, including the establishment of a judicial council to oversee the judiciary and the creation of a new court system to handle financial disputes. It also discusses the need for greater transparency and accountability in the judicial process.

6. The sixth part of the document discusses the role of the public sector in the financial system. It argues that the public sector should play a more active role in providing public services and regulating the economy. The text proposes a series of measures to improve the efficiency of the public sector, including the privatization of state-owned enterprises and the introduction of performance-based contracts for public officials. It also discusses the need for greater transparency and accountability in the public sector.

7. The seventh part of the document discusses the role of the private sector in the financial system. It argues that the private sector should play a more active role in providing financial services and investing in the economy. The text proposes a series of measures to strengthen the private sector, including the establishment of a private sector council to oversee the private sector and the creation of a new private sector law to protect the rights of private citizens. It also discusses the need for greater transparency and accountability in the private sector.

8. The eighth part of the document discusses the role of the international community in the financial system. It argues that the international community should play a more active role in providing technical assistance and financial support to developing countries. The text proposes a series of measures to strengthen the international community, including the establishment of an international financial institution to provide technical assistance and the creation of a new international financial law to protect the rights of international citizens. It also discusses the need for greater transparency and accountability in the international community.

9. The ninth part of the document discusses the role of the future in the financial system. It argues that the future should play a more active role in providing financial services and investing in the economy. The text proposes a series of measures to strengthen the future, including the establishment of a future council to oversee the future and the creation of a new future law to protect the rights of future citizens. It also discusses the need for greater transparency and accountability in the future.

10. The tenth part of the document discusses the role of the past in the financial system. It argues that the past should play a more active role in providing financial services and investing in the economy. The text proposes a series of measures to strengthen the past, including the establishment of a past council to oversee the past and the creation of a new past law to protect the rights of past citizens. It also discusses the need for greater transparency and accountability in the past.

**Submission by Philipstown Conservation Board**

**To**  
**Philipstown Planning Board**  
**Regarding**  
**Hudson Highlands Reserve**

July 8, 2019

Philipstown Planning Board  
PO Box 155  
238 Main Street  
Cold Spring,  
New York 10516

Re: Hudson Highlands Reserve

Dear Chairman Merante and Members of the Philipstown Planning Board:

The Philipstown Conservation Board ("CB") has thoroughly reviewed the Draft Environmental Impact Statement ("DEIS") developed by the applicant and its consultants for the proposed Hudson Highlands Reserve ("HHR") Conservation Subdivision. The CB unequivocally finds the DEIS to be inadequate and incomplete because it fails to substantively answer a significant number of issues that are contained in the Final Scope for the DEIS adopted on July 19, 2018 by the Planning Board ("PB").

The CB understands that the PB has been inundated with vast amounts of materials for this proposed development. Therefore, for the sake of brevity we have condensed our comments to a list of easy-to-review bullet points. In addition, the CB is also filing a more detailed Supplemental Submission, providing more detail with respect to some of the points raised below. Upon request, the CB can provide additional information on each or all of the CB's concerns.

- **The Proposed HHR looks more like a conventional subdivision than it does a conservation subdivision.** The intention of Town Code, Zoning, and Overlay Districts is to allow developers to obtain a higher density of lots, if they are concentrated on a small part of a larger parcel within areas of minor conservation value, thereby protecting the biodiversity of the majority of the site. This applicant has placed the majority of the development in areas of moderate conservation value. In this situation, areas of moderate value are extremely important on both the meso- and macro- levels. As designed, the property would be fragmented into two unconnected areas with no viably functioning wildlife corridors. This is further exacerbated by the inclusion of a high-density equestrian center.

Response  
2.17



● **A conventional subdivision is preferable to a flawed Conservation Subdivision.** Most of the land within the proposed Conservation Easement is unsuitable for development, given the steep terrain. Accordingly, the CB believes that a conventional subdivision, built in accordance with existing zoning and other regulations would be preferable to a flawed Conservation Subdivision. While there are things that the developer could do to address the concerns that have been expressed, its continued failure to do so suggests that Philipstown would be better served by a conventional subdivision, absent a change in the responsiveness of the developer to the concerns that have been expressed.

Response  
2.18,  
4.1  
4.3

● **Avoiding after-the-fact approval conditions has become a best practice for municipalities.** Ongoing (meaning after development is complete) conservation, water quality, septic, stormwater, and manure management mitigations are an enormous component of how the HHR is currently proposed/designed. The CB questions whether it is realistic to believe that the subdivision and accompanying equestrian center can actually function as the applicant states that they will. Decision-makers such as the Town Board, the PB or CB should avoid the temptation to remedy incomplete or defective applications with post-approval conditions.

Response  
2.37,  
2.52

● **Homeowners Association (HOA) and general economics of the HHR are troubling.** The applicant has provided a sample template of an extensive HOA agreement, including bylaws, that is supposed to ensure that all the promises by the developer and the rules and safeguards for the subdivision, conservation easement, and equestrian center are strictly followed. Unfortunately, this is not realistic; homeowners change, priorities evolve, and the costs of maintaining such a high level of maintenance may rapidly become untenable; what happens then? What happens if the applicant can only sell half the proposed lots? How will the environmental safeguards be effectively implemented? What if future members of the HOA disagree with the goals and objectives outlined in the DEIS? The HOA has a built-in conflict of interest, which need to be mitigated with clear restrictions from the Planning Board.

Response  
2.34,  
2.36,  
2.37,  
2.52

● **In order to address the HOA conflict of interest, the HOA board of directors should consist of three residents and two public members.** In order to address the structural conflict of interest inherent within the proposed HOA, the HOA should have a five-person board of directors, consisting of three members elected by residents of HHR and two public members. Public companies in the US routinely have independent board members, and HHR and the boards of all future Conservation Subdivisions should do so as well. The two public members should be collectively nominated by Open Spaces Institute; Riverkeeper; Hudson Highlands Land Trust; Constitution Marsh Audubon Center and Sanctuary; Scenic Hudson; and the Philipstown Garden Club. If not all of the six entities listed in the prior sentence wish to participate in the nomination process, the remaining entities should do so. The two public members should be approved and appointed by the Town of Philipstown. Such public members should be full voting members of the HOA, fully indemnified as are the other board members, and should be authorized to report to the Town of Philipstown and the CB any issues or concerns they

Response  
2.38

may wish to raise with respect to HHR. The bylaws of the HOA should be modified to require that at least one public member is present at any meeting of the board in order for it to have a quorum and take any action.

**Response 2.63, 2.35, 2.40, 2.41**

- **The fine print in the HOA By-Laws, the General Rules, and the Declaration of Covenants, Restrictions & Easements is troubling.** The fine print in many of the documents in the Appendices to the DEIS is very troubling, including in particular with respect to the issue of riding horses outside of the Equestrian Center. Contrary to many representations in the DEIS that horses will not be allowed outside of the Equestrian Center, the Declaration explicitly allows for horses to be ridden on any of the “interior roadways in the Community and over and on the Historic Roadway.” In addition, although the General Rules state that horses cannot be ridden outside of the Equestrian Center, the proposed HOA Bylaws allow the HOA board to change the General Rules at any time. What other disturbing issues and possible changes are buried in the fine print? The CB recommends absolute prohibition of horses outside the paddocks and riding areas of the equestrian center. This prohibition should be enforceable by the Town’s code enforcement agents.

**Response 3B.36, 3B.42**

- **Wildlife habitat studies are deficient in both geographic and temporal scope.** No new studies have been undertaken in response to the parameters of the Scoping Document. Existing cited studies were conducted on only select portions of the property, for other earlier proposed projects that were very different in nature (ie, soil mining), for too short a duration, and/or during an inappropriate time window.

**Response 3B.14**

- **Vernal pool inventory was not conducted during the obligate window—early spring (April-May) and therefore no vernal pools were found.** Vernal pools are an extremely important biologic resource. They provide breeding grounds for reptiles and amphibians, which are an integral component of the wildlife composition of the Hudson Highlands and provide an important source of food and nutrients for a wide array of mammals, birds, and invertebrates.

**Response 3B.34, 3B.54, 3B.60**

- **Habitat fragmentation effects have been underestimated and wildlife corridors are too narrow.** The state-of-the-science of habitat fragmentation has greatly advanced since the Lathrop paper was published more than two decades ago (cited by the applicant). The DEIS has not taken the “edge effect” phenomenon into account in the project’s design, which can have major effects on fragmentation and wildlife corridors. Edge effects arise from human activities such as ground and vegetation disturbances, traffic, noise, artificial lighting, chemical pollution, and companion animals. Generally, 300 meters (approximately 900 feet) is cited as the minimum interval where negative edge effects significantly impact the function of wildlife corridors. As proposed due to edge effects, the HHR has no viable wildlife corridors, and forest fragmentation would have many adverse effects on wildlife and the matrix forest. The applicant has seemingly ignored one of the major conclusions included in its own conservation analysis; Steve Coleman, a wetland scientist and ecologist, recommended in his 2014 analysis that the two important wildlife corridors be kept open.

Response 1.3

- **Degradation of Ulmar Pond and its accompanying wetland complex.** The applicant cites the economic need to surround more than half the shoreline of the pond with eight houses, because these are “premium lots”. Placement of houses around the pond, even with a 140 foot buffer, will have a significant negative impact, however, on the riparian corridor. The CB also questions how these lots can be premium, when at best they will have only winter views of the pond, and homeowners will not have direct access to the pond from their own lots. The CB is concerned that the wetlands barrier will not be preserved because it will not be adequately enforced by the proposed volunteer-run, residents-only HOA.

Response 2.65

- **The equestrian center as designed is not the form of an agricultural enterprise that is consistent with a conservation easement.** The CB has significant concerns in regard to this proposed commercial operation on 11 acres. The equestrian center will comprise large areas of indoor space, with impermeable surfaces and very high livestock density. Animal, human, and vehicular traffic from both regular use and special events are of concern, as is the effective management of waste and introduced vermin. As geographically situated, the equestrian center represents a significant man-made barrier to wildlife migration and intensifies the aforementioned edge effect. An equestrian center of this size in operation 24/7, 365 days a year is not consistent with the intent of limited agricultural use provision for a conservation easement. The CB recommends a significant downsizing of the equestrian center, relocation further west/north to increase the width of the wildlife corridor, and its exclusion from the calculation of conserved lands.

Response 2.49

- **Who will hold the conservation easement on this property?** As now proposed, a conservation easement on the HHR would be difficult to steward because of the complexity of maintenance, financial resources required, and the large number of homeowners. Moreover, as previously mentioned, high density agriculture is not in keeping with a true conservation easement. The Hudson Highlands Land Trust has recommended that the conservation easement holder must be nationally accredited by the Land Trust Accreditation Commission. The CB strongly endorses that recommendation.
- **The CB endorses the concerns and recommendations made by the Hudson Highlands Land Trust, the Putnam Highlands Audubon Society, Constitution Marsh, and the Black Rock Forest Consortium.** All of these organizations have a well-deserved reputation for thoughtful environmental and conservation support. None have a history of knee-jerk negative reactions to development. As evidenced by the comments made at the June 20th public hearing, their views and recommendations are consistent with the views of many, if not most, of the residents of Philipstown. **The CB believes that the deep environmental knowledge of the aforementioned groups, particularly with regard to wildlife habitat and water resources, should be given great weight by the PB.**

**Response 3A.11**

- **The remedies proposed in the DEIS for violations of the HOA Bylaws, the Manure Management Plan, and the Conservation Easement are time-consuming, impractical, and unworkable.** According to the numbers in the DEIS, approximately one million pounds per year of horse waste will be generated at the Equestrian Center (DEIS, Appendix "N": September 21, 2017 report of B. Laing, Environmental Consultant for HHR; 65 lbs. stall waste per horse per day x 40 horses x 365 days = 949,000 lbs. per year). Any malfunction in the complicated and critically-important Manure Management Plan will constitute a public emergency. The DEIS enforcement mechanisms, which call for notices of violations, warning letters, and ultimately filing expensive, time-consuming lawsuits, is a recipe for disaster for the water resources and wildlife habitat contained within HHR. In the event of a malfunction that results in an unanswered warning letter, all live stock should be required to be immediately removed from the facility by order of the code enforcement officers of Philipstown, until all violations have been rectified.

The CB understands that the HHR represents the most complicated project to come before the PB. We urge the PB to utilize all constructive comments from the public and involved agencies to modify the proposed HHR subdivision as much as necessary regardless of the applicant's resistance. As a precedent-setting first conservation subdivision for Philipstown, the HHR needs to be done right; it should not only follow all aspects of the Town Code but also adhere to the spirit of the Comprehensive Plan and utilize sound, best-practices for its environmental planning. As currently proposed, it does not meet that standard.

The CB is willing to help the PB develop the final EIS, should the PB wish for it to do so.

Respectfully submitted by the Philipstown Conservation Board, July 8, 2019.

Mark Galezo, Chair  
Lew Kingsley  
Robert Repetto  
D.J. (Jan) Baker  
Krystal Ford

Andy Galler  
M.J. Martin  
Anthony Deos (alternate)  
Max Garfinkle, Natural Resources Officer  
& Wetlands Inspector

Hudson Highlands Reserve DEIS  
Questions for July 8th from Kim Conner  
Page 1 of 2

How many

Response 2.8

- Existing structures including dwellings
- Existing dwellings
- Proposed new structures including dwellings
- Proposed new dwellings including any caretaker residences for the equestrian facility
- Proposed structures related to the equestrian facility
- Proposed structures related to sewage treatment facility
- Parking spaces for cars for the equestrian facility
- Parking spaces for horse trailers for the equestrian facility
- Parking spaces for other purposes unrelated to the equestrian facility

Which of the four LEED building rating systems will the development be built under?

Response 2.9

- LEED for Building Design and Construction
- LEED for Interior Design and Construction
- LEED for Building Operations and Maintenance
- LEED for Neighborhood Development

Response 2.10 Which structures will be built to LEED standards?  
(please list all)

What level of LEED certification will these structures be built under?

Response 2.11

- Certified
- Silver
- Gold
- Platinum

Response 2.12 How many square feet for each proposed new dwelling?  
(please list all)

Response 2.13 How many square feet for each proposed structure related to the equestrian center?  
(please list all)

Response 2.14 How many square feet for each proposed structure which is not a dwelling nor related to the equestrian center?  
(please list all)

Response 2.15 What is the estimated annual energy consumption for each structure, existing and proposed, including heating and cooling?  
(please list all)

Response 2.16 Will there be swimming pools and if so, how many and what size, i.e., what are the dimensions and how many gallons will each hold? Will they be heated? Will their cleaning methods and effluent be controlled by the HOA?

- Response**  
2.84 Please explain the septic system as planned. We were given to understand that there would be one central system, but the HHR website at <https://www.hudsonhighlandreserve.com/news> says "Domestic water will be provided by individual wellheads, while septic systems will be organized and phased to three separate septic fields."
- What is the total percentage of the lands to be placed under the conservation easement that consist of Class Slopes, i.e., slopes equal to or over 35%?
- Response**  
2.47 What is the total percentage of the lands to be placed under the conservation easement that consist of Class Slopes, i.e., slopes equal to or over 25%?
- What is the total percentage of the lands to be placed under the conservation easement that consist of Class Slopes, i.e., slopes equal to or over 15%?
- Response**  
2.48 What is the total percentage of the lands to be placed under the conservation easement that consist of steep terrain that is located within 50 feet of a watercourse, controlled wetland as defined in Chapter 93 or lands that are regulated by the State of New York pursuant to the Freshwater Wetlands Act (Article 24 of the New York Environmental Conservation Law)?
- Response**  
2.34 Will the HOA be managed by owners or by management company? Will there be any restriction on whether or not a management company can be engaged?
- Response**  
2.35 Can the HOA board of directors change the rules/restrictions for the development related to the equestrian center? What changes would the HOA board of directors be permitted to make to the HOA in general?
- Response**  
2.98 How will the roads be maintained?  
What surfacing materials will be used?  
Will there be storage facilities for salt / grit / sand etc.? If so, how will stored salt / treated grit etc. be prevented from contaminating groundwater?
- Response**  
2.99
- Response**  
2.88 How does the applicant plan to resolve the access issues presented by the June 7, 2019 DOT letter from Mary McCullough?
- Response**  
3A.5 What will the total impervious surface coverage be once the access road is constructed for the HC lot on Route 9 that contains the office building, since that lot will remain a separate lot?
- Response**  
4.7 In several places in the DEIS, the applicant refers to "commercial taxes generated by the equestrian center" Please explain specifically what commercial and other tax revenue would be generated by the equestrian center.

My home is Edgar Thomson & Leo at  
409 South 1st Pass, Harrison with  
my wife Patricia.

This project has been a long  
time awaiting, to get ready for  
the best one. I vote yes to the  
Hudson Highland Reserve project.



Anthony Merante, Chairmen

July 1, 2019

Philippstown Planning Board

Re: Developement North of GlassBury Courte 9

I would like to take this opportunity to express my opinion of this development:

1. I believe the constuction of the Twenty Five (25) homes and the the Forty Horse Stable at the above location would a hugh Negative effect on what I believe to be a pristine area.

2. A large negative impact on traffic on route 9 from increased volume from both individual and commercial vehicles i.e. horse trailers.

3. Possible impact to our Taxes due to increased population in our schools.

4. While the 25 homes may be privately owned , by the home owners, the horse stable and horses will be commercial:

a) Does this violate exiting zoning laws

Response 3A.11

b) Pollution from horse waste both solid and liquid, and how doesn't the affect our water table

5. How does this effect to the various wild life in the area.

Response 2.43

6. Should the developement procede who will monitor and ENFORCE and finance the so called assurances to presurve the area , envirement and property.

I coulkd go on and on but when such a large number of area residents are so opposed to this entire developement we should NOT only have the final say in this matter. I beleive the entire project should NOT BE ALLOWED.

*John Mangano*  
JOHN MANGANO

J.M.M.  
8 Black Bird Bay  
Cold Spring, New York 10516



Anthony Merante, Chairmen

July 1, 2019

Phillipstown Planning Board

Re: Development North of GlassBury Courte 9

I would like to take this opportunity to express my opinion of this development:

1. I believe the constuction of the Twenty Five (25) homes and the the Forty Horse Stable at the above location would a hugh Negative effect on what I believe to be a pristine area.

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3. Possible impact to our Taxes due to increased population in our schools.

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a) Does this violate exiting zoning laws

Response 3A.11 b) Pollution from horse waste both solid and liquid, and how doesn the affect our water table

5. How does this effect to the various wild life in the area.

Response 2.43 6. Should the developement procede who will monitor and ENFORCE and finance the so called assurances to presurve the area , envirement and property.

I could go on and on but when such a large number of area residents are so opposed to this entire development we should NOT only have the final say in this matter. I believe the entire project should NOT BE ALLOWED.

Linda & Jack Weinstein  
6 Black Bird Bay  
Cold Spring, NY

42



**Fwd: conservation sub-division**

Lynda Ann Ewen <laewen@hotmail.com>  
To: Anthony Merante <adm1243@gmail.com>  
Cc: Anthony Merante <swabby6569@outlook.com>, Lynda Ann Ewen <laewen@hotmail.com>

Sun, Jul 7, 2019 at 8:54 PM

Begin forwarded message:

**From:** Lynda Ann <laewen@hotmail.com>  
**Subject:** conservation sub-division  
**Date:** July 7, 2019 at 7:33:41 PM EDT  
**To:** amerante@philipstown.com

TO: Philipstown Planning Board  
FROM: Lynda Ann Ewen, 18 Yesterday Drive, Cold Spring  
RE: Proposed Hudson Highlands Reserve

I oppose this development because the developers have not met the following concerns:

- Response 3C.4 1. Forty horses require 40 acres devoted to their maintenance. Keeping the horses in limited space and carting urine and manure soaked hay off the mountain in large trucks adding to the traffic on Route 9 is unacceptable.
- 2. The proposed private business of horse training and horse shows runs counter to the spirit and law of a conservation subdivision, which was intended for the development of residences.
- 3. The fact that the developers have failed several times to address the concerns of the planning board suggests that they expect they can "wear down" opposition—an attitude that runs counter to the expectation that they will be good neighbors in our community.
- 4. The refusal by Hudson Highlands Land Trust, a highly respected conservation organization, to play the role of conservator reflects the serious flaws in the plans.

**Subject:** Fwd: Hudson Highland Reserve  
**From:** Linda Valentino <lvalentino@philipstown.com>  
**Date:** 7/8/2019, 9:02 AM  
**To:** Tara <tpercacciolo@philipstown.com>

----- Forwarded Message -----

**Subject:**Hudson Highland Reserve  
**Date:**Sun, 7 Jul 2019 06:19:44 -0400  
**From:**susan lowry <ssusanlowry@gmail.com>  
**To:**lvalentino@philipstown.com

Dear Members of the Planning Board,

We write as citizens of Cold Spring Ny, and neighbors of the proposed Hudson Highlands Reserve development. We live at 130 Horton Road, directly to the south and east of the proposed project. We have lived at this address since 1997 and have come to appreciate the unique qualities of the area with its quiet residential neighborhoods and extensive open space. Indeed, in order to preserve these qualities we partnered with the Hudson Highlands Trust and three of our neighbors to purchase land from the Merson family. We collectively put this land into a conservation easement thus creating over 100 acres of protected land when you include all of our properties. It is with this sense of commitment to the community and open space that we want to address several aspects of the proposed development that we find deeply troubling. To be clear we are not opposed to judicious development and land management but we are vehemently opposed to creating what will in effect be an industrial scale commercial development in the middle of a wooded land under the guise of conservation project. Three aspects of this development are troubling and warrant your careful consideration: the bifurcating of conservation land that will disrupt breeding ground and natural habitats; the over density of the proposed 25 housing sites; and most problematic the 160,000 square foot equestrian center. Others, I am sure will address the impact on the environment and the overly dense housing units. We want to focus your attention on the "Walmart" of equestrian centers, designed to accommodate 40 horses. Both Horton Road and East Mountain Road north are small, windy roads that cut through quiet residential neighborhoods; Horton Road, in fact in partially dirt reflecting its rural status even within the town. How, we ask will forty horses be serviced by either of these roads? It is estimated that 40 horses will produce over 2000 lbs of raw waste a day (37 lbs of manure and 2.4 gallons of urine). Over the course of a year this amounts of approximately 720,000 pounds of waste a year that will need to be removed and serviced. We understand that the current plan calls for removing the manure every two weeks; that means over 28,000 lbs of manure will be stored on site. Where will this be stored? How many truck loads will be required to remove this waste? What are the safeguards that this waste will not pollute the land or local aquifers? What considerations have been made for the smell of this waste polluting our atmosphere? Anyone who have ever gone to an equestrian center or a horse farm knows that these are not neutral sites but come with strong odors, a great deal of mess, which is why they are never in residential areas. Equally, it is estimated that the average horse eats 15-20 lbs of hay per day or 600-800 lbs of hay a per day to feed all forty horses. Since the average

Response  
3B.34  
3B.54  
3B.65

Response  
2.70

Response  
2.89

**Response 3A.9** bale of hay weighs approximately 60 lbs this means that 10-13 bales of hay a day are required to feed all forty horses or well over 3650 bales per year assuming the horses are fed primarily on hay. We ask the same question about provisioning the horses as we do about waste removal. How will this be accomplished? How Many trucks a day/a year will be required to service the horses and what can kind if impact will all this activity have on two of the quietest roads in the area? We are also concerned that an industrial scaled equestrian center will require extensive amenities to support it? Where will parking be for all the cars coming to the center? Where will horse trailers be stored? How many adjacent buildings will be required to support the center?

Any walk around the property under consideration and the adjacent lands to the north, south, and east make clear how wooded and quiet this area is and how damaging a Walmart-sized equestrian center will be to all adjacent properties. Indeed the scale of this equestrian center makes a mockery of the progressive conservation program that Philipstown has recently adopted. You have a unique opportunity at the Planning Board to ensure that the development of Hudson Highlands Reserve is thoughtful and sustainable. It should be a model of what can be achieved not a precedent for using the guise of a conservation development to build a Walmart-sized equestrian center in the middle of a wooded residential neighborhood that many of have gone to great lengths and cost to preserve.

Sincerely,  
Glenn and Susan Lowry  
130 Horton Road

[www.SusanLowryNancyBerner.com](http://www.SusanLowryNancyBerner.com)

To: Philipstown Planning Board  
Philipstown Town Hall  
Cold Spring, N.Y. 10516

From: Mark Tabashnick  
464 E. Mountain Rd. So.  
Cold Spring, N.Y. 10516

Subject: Public Hearing Comments:  
Hudson Highlands Reserve

Date: July 4, 2019

To Whom It May Concern:

Today is a yearly commemoration of the Anniversary of the founding principles of the United States of America on July 4,1776. As a national holiday, citizens from all 50 United States, celebrate the inherent freedoms and liberties implied by the Constitution and its evolving Amendments. Actions seen then and now too, that portray citizens in voicing their rights and in voting for official representatives who will make into Law the "Will" of the majority.

So too now in 2019 as in 1776, I ask my local representatives, at the Planning Board to weigh in once more on the status and proceedings of a real estate development project: Hudson Highlands Reserve.

After being present and a witness on some of these public meetings, I can wholly attest and confirm that the controversies surrounding the permits and licensing is a valid concern for a majority of residents. Needless to say, as a member of this Board you are well aware of the current facts and developer proposals that you must discern objectively and act upon with your vote.

As a resident of Philipstown, I am compelled to write to you and offer my opinions, not withstanding your powers as well, as it is not for me to decide herein, but at least extend some clarity on the issues.

So for me, I will weigh in on a subject that has caused much debate in the public forum: a proposal for the development and maintenance of a "Commercial Equestrian Center" on site and in nearby proximity to the site plan for 25 houses. At the core of the controversy is whether the developers, their attorneys, and consultants have a true understanding of the historical context of horsemanship in and around this regional area. Unlike training facilities and boarding areas for thoroughbred racing interests, businesses in other well known regions, the underlying premise of the proposed facility is stated to focus on a minor area of equine sport, known as : "Dressage", and sometimes referred to in Olympic style events like Hedge Jumping, and Show performances. History does reveal that interests in this type of training for both horse and rider go back centuries, even before the United States Constitution. Yet, it has never gained the popularity or commercial success to make this sport either commercially viable or substantially practiced by even the most active and interested horse and equine professionals in the United States of America.

Response  
2.71

Therefore, I ask you, if you concur with my opinions and have substantiated my allegations pertaining to this issue, then all else is logically apparent. Setting aside the environmental impact of feeding the horses and extracting their waste, ecologists have warned of the deteriorating cycle and danger in regards to local ponds and under laying aquavirs. All these issues are well known and have been aired in public meetings. Good Judgment and common sense point to the scope of these concerns, and taken together with others not mentioned here, it's incumbent to review our historical precedent as a Town.

The over riding issue for the Philipstown Planning Board is how we plan and regulate future land subdivisions as a community. Real estate developers interested in a full scale commercial dressage equestrian center with riding rings, trails, grazing grounds, sheltered stalls and all weather maintenance facilities need to question their own over riding premises and priorities in regards to local zoning, building codes and historical use. They should not be discouraged in finding a suitable location and in practicing or reviving a sport and life style they are personally interested in following. Yet, their burden is not the truth for many here in Town. Residents of Philipstown have participated by speaking, writing, and debating the issues. Now is the time to act and vote with the majority.

The Hudson Highlands Reserve development, as submitted and reviewed by residents and officials, does not meet the standards inherent in its understanding and goals of any future environmental impact, and as such should be rejected as due process under the Law.

July 5, 2019

Mr. Anthony Merante, Chairman  
Philipstown Planning Board  
238 Main Street  
Cold Spring NY 10516

Re: Hudson Highlands Reserve Housing & Equestrian Center Development

Dear Chairman Merante and Honorable Board Members,

Response  
2.90

I am a resident of Cold Spring who lives near the proposed "Hudson Highlands" a 25 single family home and Equestrian Center development. I am also a professional developer and as such, I am not anti-development and I am very familiar with the process of entitlements. Based on my experience, the Hudson Highlands developer has not presented sufficient information for its site plan to be considered for approval. Specifically, the site plan proposes a direct access/egress to NYS Route 9 even though the New York State Department of Transportation has rejected the developer's request for access. Additionally, the developer has not provided a traffic study so local officials and the public are not able to quantify the potential impact to local roads and other public infrastructure the development poses. Without knowing how access will be provided to the complex and without information to assess the impact of the development on public infrastructure, the site plan cannot be seriously considered at this time and should be rejected.

Prior to a public site plan review a developer should meet with local officials, including the local Fire Authority and Public Works, who should then provide recommendations to the planning board which become part of the public record of the project. I have found that Fire Authorities and Public Works Departments provide valuable insight into site plan life safety concerns, such as fire truck access, and the potential impact the development poses on local roads, drainage, and other public infrastructure. As you know, Site Plan approval can include requirements for the developer to provide offsite improvements to public infrastructure to alleviate burdens imposed by the development, including road widenings, drainage improvements, turn lane construction, and/or adding traffic signals, which I believe needs to be considered for this project.

Response  
2.85

Since Hudson Highlands has been denied direct access to NYS Route 9, the development will most likely connect to East Mountain Road North, East Mountain Road South, or Horton Road. A commercial equestrian center will bring regular traffic of large vehicles with attached horse trailers as well as tractor trailers delivering horse feed and removing manure from approximately 40 horses (*which produce approximately 1 ton of waste per day*). There will also be a significant amount of traffic from planned equestrian events and shows, not to mention 25 additional homes which could become full time residents whether the developer intends to market to weekend residents or not. The likely access roads already have narrow curves with significant blind spots to oncoming traffic. Difficulties navigating the narrow curves of East Mountain Road are well known within the community and if you examine the guardrail on Horton Road, where the grade drops before the bridge over Clove Creek, you will see significant damage from minor accidents at this difficult location as well. I believe that a proper traffic study and review by Philipstown Public Works Department will reveal that whichever road the developer proposes will require significant improvements to accommodate the added commercial truck traffic a

Response  
3A.9

commercial equestrian center would bring. Furthermore, the cost and the construction of these improvements should be the developer's responsibility and the proposed work should be included in the public review of the site plan.

Thank you,

A handwritten signature in black ink, appearing to read "Adam Hird". The signature is written in a cursive style with a large initial 'A'.

Adam Hird

63 Horton Rd,  
Cold Spring NY



July 7, 2019

Dear Philipstown Planning Board, *Anthony Morente, Chairman*

The APPENDIX R Town of Philipstown, Town Code, Chapter 175, Zoning, Article V. Open Space Development that was adopted by the Town Board on May 5, 2011 is an important planning document for the future of our region. The first applicant under this particular code is an application to develop a parcel in Cold Spring to support 25 new homes and 40 horses, the Hudson Highlands Reserve.

Multiple concerns of this application have been made public. We especially support the concerns of the easement itself, listed in the June 18, 2019 letter from the HHLT to the Philipstown Planning Board, *referenced* attached here.

<https://www.hhlt.org/wp-content/uploads/2019/06/HHLT-Comments-on-HHR-DEIS.pdf>

We urge the Planning Board to reject the HHR application as it stands now for the following reasons:

Response

3B.34, 3B.54  
3B.70

-The findings of the EIS make it clear the current proposal will disrupt wildlife to such an extent the aims of the conservation easement cannot be met, especially with respect to the proposed fragmentation of the conserved areas.

Response

2.51, 3B.42

-The measure of current wildlife populations have not yet been sufficiently established to create a baseline.

Response

3A.4

-The measure of the negative effects of the horse population and its maintenance with respect to wildlife, waterways, traffic, noise have not been sufficiently established.

Response

3D.11, 3D.5

-The protection of views of nature from Breakneck Ridge, New York State's most popular hiking trail have not been established.

Response

2.85,

-Alternate access into the development (if the DOT does not approve Route 9 access) has not been established.

Response

2.93

-Rules and accountability for the HHR management (AIRBNB, pollutants on site, pets, governance, etc..) have not been sufficiently established.

Response

2.51

-Accountability, measuring standards, monitoring terms and frequency have not been sufficiently established for the easement, the equestrian facility or the housing development.

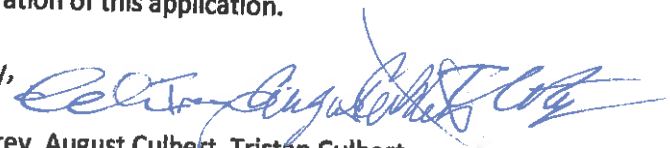
-Professional references and credentials for the developer and the architect for a project of this size and complexity have not been established.

Response

2.90

In addition, we recommend the Planning Board consider requiring the applicant to obtain preliminary approval from the NYDOT for the new road access onto Route 9, and requiring the applicant to obtain confirmed participation of an independent agency to monitor the proposed easement prior to further consideration of this application.

Sincerely,

  
Celia Imrey, August Culbert, Tristan Culbert  
62 Horton Road  
Cold Spring NY 10516

**Subject:** Hudson Highlands Reserve  
**From:** Sidney Babcock <shbabcockiv@gmail.com>  
**Date:** 7/6/2019, 11:16 AM  
**To:** amerante@philipstown.com, tpercacciolo@philipstown.com

Dear Planning Board Members:

It absolutely astonished me that the Hudson Highlands Reserve project has reached this stage with so many, many unanswered questions. Of most concern are the impacts on the environment both anticipated and unanticipated. This project has so many issues that have not been appropriately studied. If approved, the precedent that it will set will be nearly impossible to reverse. This is a moment of truth for our environment and our future. The only real tangible impact that we can have is on a local level. This development is an assault on our communal values. Those that spoke out at the hearing were eloquent and moving. After hearing so much carefully considered opposition, the developer still chooses to proceed as planned. Alas, those plans are ill conceived. The developer does not have any track record to offer for tackling all of the sensitive issues involved here. Indeed, the prime example of the developer's taste and attitude is his converted brownstone on east 89th in Manhattan. The below photographs of that converted brownstone show a complete insensitivity to the neighborhood and what is

image1.jpeg

image2.jpeg

appropriate.

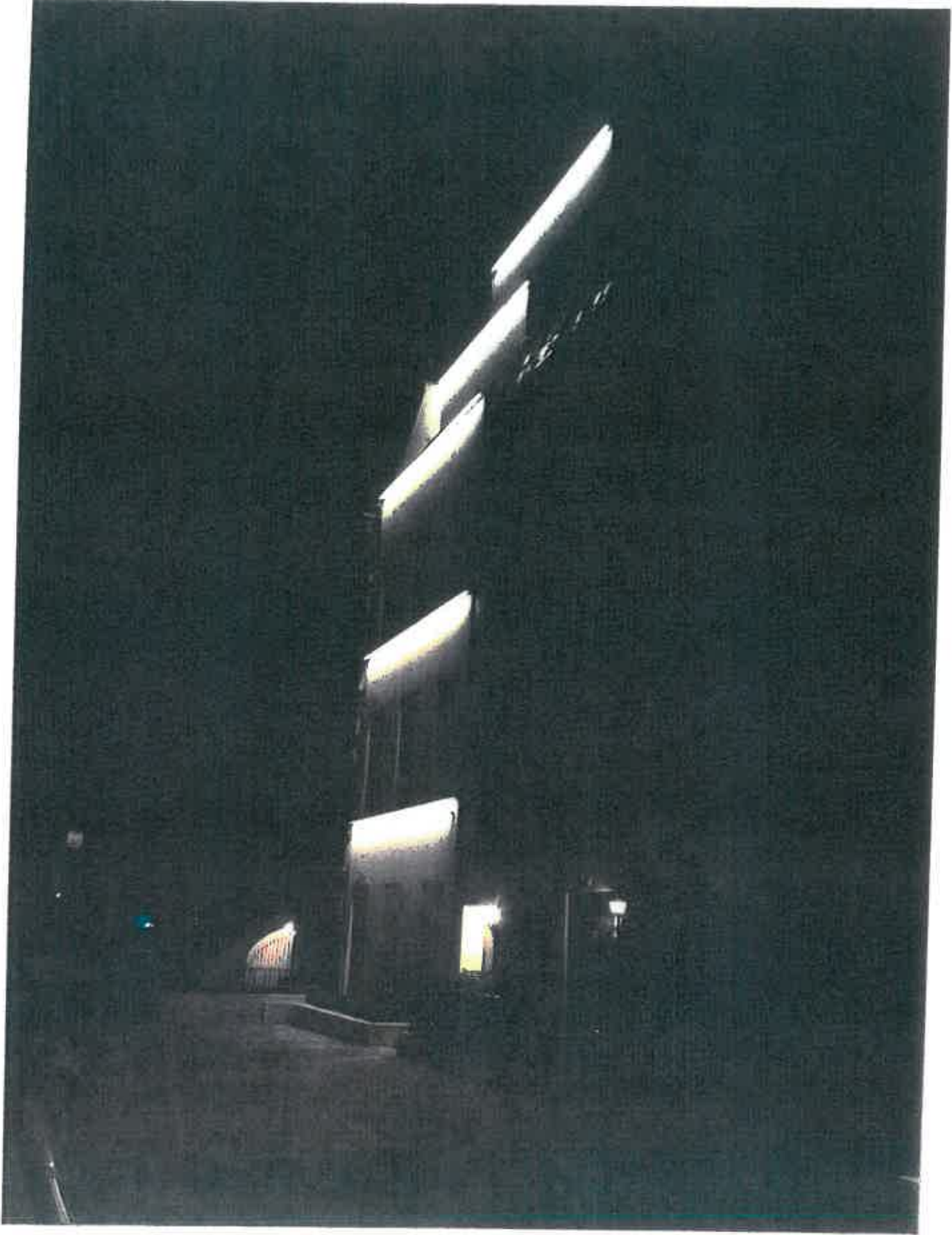
Unfettered by Landmarks, the architect/developer/ owner did what he wanted. The stark white facade is lit on each floor by neon tubing. With this as an example, it is abundantly clear that the proposed development will not take seriously the communities concerns. Just in the last few days, a major report was released about the essential role of trees in combating global warming. We are all now responsible for reversing the looming crisis and have to start now. Wouldn't it be great to live in a world where people of means wanted to improve the environment rather than

exploit it. With so much wealth, a simple gesture of donating the land would be a noble deed and one that the developer and his family could take much pride in.

Thank you for all your thoughtful deliberation in this matter,  
Sidney Babcock  
Garrison, NY

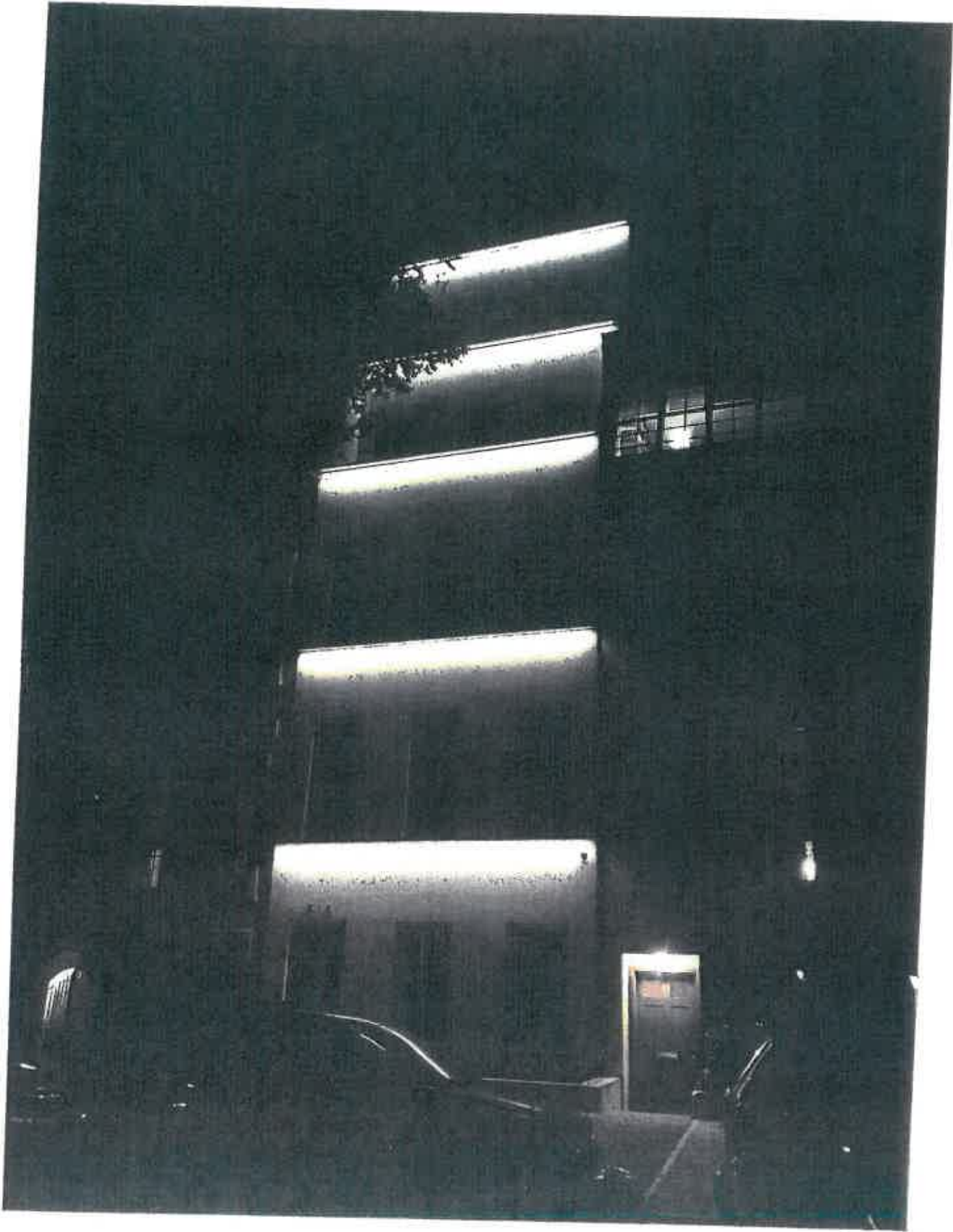
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—image2.jpeg

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**Attachments:**

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**image1.jpeg** 1.7 MB

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**image2.jpeg** 1.9 MB





**RONALD J. GAINER, P.E., PLLC**  
31 Baldwin Road, Patterson, NY 12563  
Mailing Address: PO BOX 417, Pawling, NY 12564  
office 845-878-6507 cell 845-527-1432

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TO: Town of Philipstown Planning Board      DATE: July 5, 2019  
FROM: Ronald J. Gainer, PE      SUBJ: Horton Road LLC Subdivision; NYS Route 9

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Project Scope: Proposed "Conservation" Subdivision + Equestrian Center within "Common Area"  
Zoning District: "M" & "RR" (Industrial/Manufacturing & Rural Residential Districts), and encompassing Open Space Conservation (OSO), Scenic Protection (SP0) & Clove Creek Aquifer (CCA) Overlay Districts

As requested, my office has completed review of the May 2019 Draft Environmental Impact Statement (DEIS) prepared for the Hudson Highlands Reserve project, which was accepted as complete by the Town of Philipstown Planning Board on May 16, 2019 and was the subject of a Public Hearing on June 20, 2019.

From this review, it is believed that the following matters warrant further explanation or clarification as the project moves through the environmental review process mandated by NYCRR Part 617.

1. **Project Access** –

From early on in the Board’s review process, recognizing the poor geometry, limited width, and other related factors concerning the existing Town roadways bordering the site, as well as the expected traffic to be generated within the project and especially considering the transportation impacts of the equestrian center proposed, the Planning Board determined that that the project’s access should only be obtained from NYS Route 9. More recently, the Town of Philipstown Highway Superintendent has expressed similar concerns, and does not support any routine use of either Horton Road or East Mountain Road North for access to the proposed development.

Response

2.85 Nevertheless, based upon limited technical supporting documentation that has apparently been submitted to their office by the applicant’s consultants, the New York State Department of Transportation (NYS DOT) has advised that they do not currently support project access from NYS Route 9. It is therefore necessary that, as part of this EIS process, the applicant must conclusively establish to the satisfaction of NYS DOT that suitable mitigation/roadway improvements shall be constructed by the applicant along the Route 9 corridor so as to permit that agency to grant such access so as to avoid adverse impacts to the adjacent Town roadways.

2. **Conservation Subdivision Standards** - The project’s design and layout must comply with all requirements of §175-20 of the Town’s Zoning Ordinance. Based upon the current design plans for the project, the applicant should clarify how the following standards are met:

a) **Project Density** - Pursuant to §175-20B(1), the applicant has utilized a formula, taking into account the various environmental constraints existing on the tract, in order to establish a permitted overall project density. Through this calculation, they believe that a residential housing count of 25 lots overall is permissible.

Response

2.24 As the Board is aware, my office previously reviewed the environmental constraints mapping to evaluate the application of this formula on the subject project, and through this we established that the overall permitted project density utilizing the “formula method” allowed in the Ordinance is 24 units, considering the entire tract (including the property within the “M” zoning district). Further, if it is determined that no



**RE: DEIS technical comments - Horton Road LLC Subdivision, NYS Route 9**

**Response  
2.25**

density should be assigned to these "M" district lands (since residential uses are not permitted in the Chapter 175 "Use" Table for this zone), the permitted project density would then be reduced to 22 units.

**Response  
2.26**

In summary, as the design and layout of the project plans evolve, this analysis of "constrained lands" must again be reviewed to establish with finality the permitted density for the overall tract. Further, with the provision of the equestrian center, it must be determined whether any resident accommodations will be provided for this amenity and whether this too must be considered against the dwelling count ultimately established for the property.

**Response  
2.33**

- b) **Lot sizes** – Per §175-19B, a variety of lot sizes are recommended so as to represent a "cluster" subdivision layout and so maximize the creation of substantial open space. In §175-20C, it is further suggested that lot sizes as small as those permitted for the Town's "Hamlet" zoning districts be considered (or ½ acre). However, the development proposes a "cookie cutter" layout of lots all generally 1 acre in size, which is not in keeping with the intent of these regulations. This ultimately leads to the opposite effect of committing excessive land to individual lots, and spreading out the development into areas of higher conservation value, which could be avoided with smaller, or at least some variety of lot sizes (i.e.; lots which extend along the west side of Ulmar Pond). It is suggested that various lots around Ulmar Pond either be eliminated or otherwise significantly reduced in size to increase both conserved lands as well as to widen wildlife corridors.

It is recognized that "Alternative D", while having other disadvantages, does represent a different lot arrangement whereby smaller lots are proposed so that additional lands may be protected, specifically in the area of Ulmar Pond. The project design which is ultimately endorsed by the Town should be no less protective of the site's established high and medium conservation value lands.

**Response  
2.65**

- c) **Equestrian Center within what is being proposed as "preserved conservation area"** – Town regulations make clear that the purpose of open space development is to preserve large tracts of open space land in order to maintain the rural appearance and environmental resources of the Town. Yet the project proposes to place an 11-acre equestrian facility and ancillary structures, parking, access drives, etc. within such space which is to be proposed to be "permanently protected". While the provision of such a facility may be permitted, it certainly should not be considered as "open space" within the meaning of the term.

**Response  
3A.26**

Further, an "accessory bldg" for the equestrian center is shown, of unknown size and purpose. The need for the size of, and uses planned within, this building, as well as the manner its location was determined, should be explained. Placement of this structure closer to the equestrian center (possibly between the equestrian parking area and adjacent dead-end roadway), so as to reduce the overall area encumbered by the equestrian center and to increase wildlife corridors, should be considered. This is especially important since, as noted in the DEIS, seeps have been noted in this area and "*...are fragile habitats that are an important resource for water dependent wildlife and vegetation*". Yet, the proposed accessory building and related improvements (pavement/parking/manure enclosure/dumpster) are currently planned in proximity to the identified seeps.

**3. Stormwater Design Concerns –**

**Response  
3A.1**

- a) **General** – The design information contained within Appendix M is far too preliminary to permit a detailed evaluation of the stormwater design or compliance with SWPPP requirements. Initially, in order to allow for any analysis of stormwater design facilities and related disturbance issues, the conceptual design



**RE: DEIS technical comments - Horton Road LLC Subdivision, NYS Route 9**

information should be added to the "Preliminary Utility Plan" (once the project's constraint mapping is overlaid) so that their general sizing, function and practicality can be established.

Response  
3A.2

- b) **Stormwater Controls along project roadways** – the conceptual drainage design suggests the use of dry swales with check dams along all project roadways. While this is an appropriate stormwater conveyance for lesser sloped areas, both the "entry road" and "main road" contain areas of significant grades where this would not be appropriate. Formal drainage facilities will be required in such areas. In other areas, turf- or soil-reinforcement techniques will be necessary to prevent erosive conditions. These should all be noted, so that as the project advances necessary E/C measures are followed.

Response  
3A.3

- c) **Stormwater controls within individual lots or common areas** – It is noted that each lot is proposed to contain individual rain gardens as mitigation. It should be explained what controls and enforcement mechanisms will be established on any such required improvements to assure their long-term viability and function. Beyond these techniques, various water quality treatment measures will serve multiple residences, which will further tax the ability to control and manage these facilities.

Response  
3A.4

- d) **Calculation of impervious areas** – It is noted that all outdoor paddock areas will include an impermeable barrier to address potential pollution concerns of the horses to be housed on the property. It is uncertain whether this, as well as the management and treatment of run-off from such areas, is addressed by the conceptual stormwater design incorporated into the DEIS. Additionally, the treatment of run-off from such equestrian areas from a water quality standpoint must be incorporated into the design plans.

**4. Project Design considerations –**

Response  
2.91

- a) **Construction Standards** – Although Town roadway standards specify a maximum grade of 10%, it is understood that some relief will be sought for both roadway grades and consideration of alternate roadway construction standards for access to the individual lots. While grades of up to 12% may be warranted along the entrance roadway in order to both obtain access from Route 9 and to minimize the extent of cuts and fills along its profile, all other roadways should comply with maximum grade requirements.

Response  
2.92

- b) **Construction Sequencing/Project Phasing** – Beyond an understanding of the overall project design envisioned by the applicant, it is necessary for the applicant to provide a detailed explanation of the manner that the project will be phased to assure that the construction of all required project infrastructure proceeds logically. Provided that NYS DOT ultimately authorizes the Route 9 access currently proposed, the extent of construction envisioned (which must conform with minimum phasing requirements of 276 of NYS Town Law) should be explained. The timing of the equestrian center's construction should also be noted, as well as whether any aspects of this facility will be phased.

Response  
2.86

- c) **Project Roadway layouts** – It is recognized that a primary goal of conservation subdivisions is to preserve the rural appearance and environmental resources of the Town. Therefore, while secondary emergency access to the site represents an appropriate design consideration, this should be accomplished with the least impact to the site's identified sensitive lands. Given this, it would appear that the proposed secondary access that will extend out to Horton Road seems redundant, especially since an access already exists to this roadway which serves other residences adjacent to the project. Elimination of the project's secondary, emergency access would provide larger wildlife buffers in an area encumbered by seeps,



**RE: DEIS technical comments - Horton Road LLC Subdivision, NYS Route 9**

wetlands, and stream corridors. The applicant should further review whether the existing access out to Horton Road could serve as the emergency access envisioned.

Response  
2.93

- d) **Control over limits on disturbed areas within individual lots** – “Limits of Disturbance” lines extend through portions of most individual lots planned within the project. The manner that these could reasonably be enforced should be explained, or otherwise it should be acknowledged that overall project disturbances will be greater than that currently outlined.

5. **Utility Design Considerations** –

a) **General** –

Response  
2.81

- While various project mapping illustrates overall site constraints, the “preliminary utility plan” does not. To allow for a detailed analysis of the utility designs and related disturbance issues, this information should be added to the plan.

b) **Sanitary Sewers** -

Response  
2.82

- Due to the drawing’s scale, the sanitary sewer layout illustrated on the plan is difficult to read. Its clarity could be improved if the sanitary improvements were highlighted in color, better labeled and a legend added for the various symbols used.
- Various lots or other facilities appear to be incorrectly labeled on the sanitary profiles. For example, the facilities needed to serve lots 24 & 25 are mis-labeled on the profiles. The preliminary design information should be further reviewed, and corrected wherever necessary.
- The facilities showing at the rear of Lot 21 should be labeled and their purpose explained.

Response  
2.83

- c) **Fire Protection** – all Fire protection measures proposed for the project should be identified, including any suction hydrants within existing water resources on the tract. Appropriate access to, and required maintenance of, such facilities should be specified in the EIS documents.

6. **Other Comments** –

Response  
2.97

- It is noted that all property owners will be proportionally responsible for the expenses involved in the maintenance of all common facilities, sanitary sewer system components and the equestrian center. However, not all property owners may board horses at the facility. What accommodation, if any, will be made for such owners?

It is recommended that the above technical concerns, as well as all other comments received during the course of the public comment period, be addressed in a Final Environmental Impact Statement (FEIS) to be prepared for the project.

c: Stephen Gaba, Esq.  
Aaron Werner, AKRF



516 E. Mountain Rd S.  
Cold Spring, NY 10516  
July 6, 2019

Anthony Merante, Chair  
Philipstown Planning Board  
238 Main Street  
Cold Spring, NY 10516

Re: Hudson Highlands Reserve-DEIS Comments

Dear Chair Merante and fellow Board Members:

Notwithstanding many suggestions from the public, as well as from environmentalists and conservationists, for addressing environmental issues, the DEIS did not make any changes to the Hudson Highlands Reserve proposal. A sampling of the specific issues that have yet to be addressed or mitigated are:

Response  
3B.25

-5 houses are too close to Ulmar Pond;

Response  
2.65

-the commercial equestrian facility is too large for the site and should be removed from the conservation land;

Response  
2.90

-a traffic study for the proposed access from Route 9 has not been conducted according to NYS DOT notwithstanding a request for same in 2014.

I support the recommendations by the Hudson Highlands Land Trust (HHLT) to address the deficiencies in the DEIS. The thorough and thoughtful 25-page report includes 8 specific actions to remedy deficiencies in the studies of significant impacts and to mitigate identified impacts.

Based on the track record of this developer, I am not optimistic that the FEIS will look much different from the DEIS. Many groups, including the HHLT, have tried to suggest accommodations to the developer only to be told their experts believe the requested studies and/or mitigation are unnecessary.

The Planning Board, as the lead agency, will determine whether the project sponsor responds satisfactorily to the comments of other agencies and the public. As the first Conservation Subdivision proposal in Philipstown, it is imperative that we get this right.

Sincerely,  
/s/  
Susan Anspach

July 5, 2019

Anthony Merante, Chairman  
Philipstown Planning Board  
238 Main Street  
Cold Spring, NY 10516

Re: Hudson Highlands Reserve ("HHR")


Dear Chairman Merante and Honorable Board Members,

Response  
2.21

Thank you for the opportunity at the hearing on June 20<sup>th</sup> to raise with you some of my concerns about HHR and to call your attention to the recently enacted Climate Leadership and Community Protection Act ("CLCPA"). This Act identifies the emission of greenhouse gases as the principal cause of climate change and sets a goal for New York State of net zero emissions by 2050—the date after which it is thought that catastrophic damage from climate change may become irreversible. I don't want to trouble you by repeating here what I said then, but I would like to add a couple of points that, given the two-minute time constraint, I was unable to make at the hearing.

With the enactment of the CLCPA, it is now more than ever incumbent upon planning boards to consider the environmental impact of greenhouse gas emissions when reviewing projects under SEQRA. The Full Environmental Assessment Form asks the question in Section D.2.j. whether the proposed action will result in a substantial increase in traffic. Given the likelihood of 25 additional cars regularly transporting NYC residents back and forth to their second homes at HHR and while there, to and from those homes to Cold Spring and other places in the community, the proposed action will surely result in a substantial increase in traffic (as the DOT has separately found) and in the emission of greenhouse gases.. A correct answer of Yes in D.2.j would also have triggered question *vii* : "Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles?" Since the proposed action does not appear to include any such access or accommodations, and given the greenhouse gas emissions likely to result, absent mitigation, from the 25 additional cars, I urge the Planning Board, at a minimum, to require that HHR include a fully adequate on-site charging station meeting the DC Fast Charger standard. Without that convenience, homeowners are much less likely to own or drive cars powered by electricity and emission free. And without conversion of the transportation sector to electric or other fossil fuel free energy sources, the 2050 goal is far less likely to be achieved.

Very truly yours,

  
Irvine D. Flinn  
88 Canopus Hill Road,  
Garrison, NY 10524



RUDOLPH S. RAUCH

P.O. Box 117  
Cold Spring, NY 11056

July 5, 2019

Mr. Anthony Merante, Chairman  
Town of Philipstown Planning Board  
238 Main Street  
Cold Spring, NY 10516

RE: Hudson Highlands Reserve

Dear Chairman Merante and Members of the Planning Board:

I am writing for two reasons. First, I want to restate the concerns that I expressed in a letter of June 27, 2018 to the Planning Board, a copy of which I enclose. As far as I am able to tell, none of those concerns has been addressed in a public comment by the Applicant; indeed, no answer has emerged that suggests that the Applicant has troubled to consider them. I believe that *all* the points raised in last year's letter are germane to the Board's consideration of whether the DEIS may be accepted as final.

Second, in the year since I wrote, several other concerns have arisen as I have listened to comments from fellow Philipstown residents at Planning Board meetings, as well as in conversations with others across our community. Two seem particularly relevant. Nowhere does the Applicant show concern for the impact that the proposed equestrian facility will have on scenic views from parklands controlled by New York State. Much of the land in those parks was donated to the State by citizens who believed that its scenic beauty would be zealously protected for future generations to enjoy. The Applicant has taken no measures to assess the impact that his "conservation subdivision" would have on that enjoyment. Surely, visual simulation, including balloon tests, should be required to demonstrate what damage to the scenic value of the protected land would ensue from construction of the equestrian facility. Second, while the Applicant's representatives assure Planning Board meetings that manifold benefits will inure to the community when the development is built, nowhere does the Applicant trouble to show *how* the proposed equestrian facility will enhance recreational opportunities for members of the community. Dressage is an expensive sport; how will lodging 40 horses in a large barn improve the lives of Philipstown residents?

Response  
3D.13

Response  
3D.11

Thank you for your attention, and for your diligence and patience as this proposal has moved through many long meetings, over many years.

Respectfully,



COPY

356 Lane Gate Road  
Cold Spring, New York 10516

June 27, 2018

Mr. Andy Merante, Chair, Town of Philipstown Planning Board  
Cc: Ms. Tara Percacciolo, Secretary, Philipstown Planning Board  
238 Main Street  
Cold Spring, NY 10516

Dear Chairman Merante,

I am writing out of concern that the implications for vehicular traffic of the proposed Hudson Highlands Reserve development have not received sufficient scrutiny in the course of the assessment of the project's impact on our community. While the primary impact will doubtless be to slow down traffic on Route 9, I fear that the size of the proposed equestrian facility and the number of upscale private houses will lead to a surge in car and truck traffic across all of Philipstown. Accordingly, I am writing to ask that a traffic study be prescribed in the scoping document for the Draft EIS. Following are some specific concerns that I hope could be addressed in such a study.

Response 3A.9

1. The manure produced by 40 horses will need to be trucked offsite. A speaker at the Planning Board meeting on June 21 estimated that this "throughput" would amount to some 360 tons annually. That figure is EXCLUSIVE of bedding; that bedding, moreover, will need to be trucked ONTO the site, as will all the hay required to feed the horses. I cannot estimate how many truck trips will be required each day to sustain this large operation; I am certain that simple answer is, "Many." That answer is not sufficient.
2. The Sponsor states that the equestrian operation will require a staff of twelve. That figure does not, I believe, include all the ancillary employees required by a well-run academy that provides training for competitive equitation—whether show-jumping or Dressage. These are: individual trainers, farriers, veterinarians. Add to the car trips needed to bring these employees to the site--whether on a daily or occasional basis--the trips required to transport the horses by truck to and from competitive events, and the potential for major disruption of traffic grows significantly.
3. To the trips required to meet the needs mentioned in points 1 and 2, must be added the trips that bring household and grounds maintenance personnel to the 25 houses envisioned by the Sponsor. Ulmer Pond is not a swimming lake; at least some of the houses nestled around it are likely to feature a pool. Leaving aside the negative impact of these pools on the water table, the pools themselves will need regular maintenance, which means more outside service calls. Will the "homeowners association" contemplated by the Sponsor dictate how homeowners' pools are to be maintained? Will the

Response 3B.68

pools—and grounds of each house-- be serviced by employees of that association? If so, how many such employees does the Sponsor calculate will be needed? How many cars does that calculation imply will come to the Project each day?

These points illustrate my concerns, and I urge that they be incorporated in the scoping document. But many of these “issues” arise because the scale of the equestrian facility envisaged by the Sponsor is inappropriate, and because the number of houses requiring frequent service calls by outside providers is too great. The siting of those houses has been addressed by others—specifically the Hudson Highlands Land Trust—and there is no need to reiterate the points they made. However, if the number of houses were reduced to a level permitted “as of right,” were this development not considered a “Conservation Subdivision,” the traffic impacts would be considerably reduced.

My thanks to you and your fellow Planning Board members for your attention—not only to my letter, but to the complex, lengthy and sometimes contentious, process of reviewing this proposed development.

Respectfully,

Rudolph S. Rauch





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## Memorandum

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**To:** Town of Philipstown Planning Board  
**From:** AKRF, Inc.  
**Date:** July 3, 2019  
**Re:** Hudson Highlands Reserve Conservation Subdivision DEIS – Substantive Comments  
**Cc:** Stephen Gaba, Ron Gainer, Tara Percaciollo

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AKRF, Inc. (AKRF) has reviewed the May 2019 Draft Environmental Impact Statement (DEIS) prepared for the Hudson Highlands Reserve project. This document had previously been reviewed by AKRF for completeness. On May 16, 2019, the Town of Philipstown Planning Board, serving as Lead Agency pursuant to the State Environmental Quality Review Act (SEQRA), accepted the document as complete.

The following comments comprise AKRF's additional substantive review of the DEIS.

### GENERAL COMMENTS

1. A summary of the substantive DEIS comments received from the Planning Board, the Planning Board's consultants, and the public (both at the June 20, 2019 DEIS hearing and through the conclusion of the July 8, 2019 deadline for written comments) must be part of the Final Environmental Impact Statement (FEIS). The full hearing record (transcript) should be attached as an appendix to the FEIS and must be made available for public review along with any other reference material.
2. In addition to addressing substantive public comments, the FEIS must incorporate responses to all substantive comments received from Interested and Involved Agencies since the acceptance of the DEIS. This includes the comments received from the New York State Department of Transportation (NYSDOT) on June 7, 2019. The applicant's response should provide existing information from the Traffic Impact Study (TIS) previously completed for the proposed project by Kimley-Horn, as well as any additional information or supplemental analysis necessary to address NYSDOT's comments and concerns related to site access, sight distance, and drainage.

### I. INTRODUCTION

1. We have reviewed this material and have no substantive comments on this chapter.

## II. EXECUTIVE SUMMARY

- Response 1.1 2. The impact summary table included in the Executive Summary should include a note regarding the significance of the impact cited for the 24,000 gpd water demand from the proposed project.
- Response 1.2 3. If an impact summary table will carry over to the FEIS, an additional column noting where within the document the discussion/analysis relevant to each topic can be found.
- Response 1.3 4. The third paragraph found under B.1.b includes a currently unsupported statement that Ulmar Pond will actually be in better condition after the proposed project is developed” due to the retention of a lake management firm through the HOA. We note an inconsistency in that later in the DEIS (Section IV.A.2.a.ii), this same statement is prefaced with the phrase “the project sponsor believes...” which is more appropriate.

## III. DESCRIPTION OF THE PROPOSED PROJECT

- Response 1.4 5. The discussion of the existing architecturally significant house and barn on the property first appears in the DEIS as the fourth paragraph on page 24. The text indicates that the house “will remain on one of the Hudson Highlands Reserve residential lots” and that the barn will be “restored and adaptively reused for meetings by the HOA.” AKRF has reviewed the previously issued letters on the proposed project from the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP). The FEIS should refer to these letters while clarifying that the 1920’s home and the 1825 barn have been identified as architecturally significant through extensive site surveys and consultation with OPRHP, and that the proposed adaptive reuse of the barn will be designed through close coordination with OPRHP as development of the proposed project progresses. The existing language in the DEIS regarding historic significance seems to indicate that the determination of architectural significance was made by the Applicant without consulting with OPRHP, which is not the case. The applicant should provide the Planning Board with written concurrence from the SHPO that the proposal to adaptively reuse the barn is acceptable.
- Response 2.30 6. Review of the site plan, specifically Figure 4 of the DEIS, shows that the existing historic house referenced above would be part of proposed Lot 18 and the existing historic barn would be part of the common HOA lot. It is unclear from the narrative if the existing house on proposed Lot 18 is currently occupied. In addition, if this house would share Lot 18 with an additional house constructed as a result of the proposed project (Figure 16 appears to show it would), how did the existing house factor into the overall density calculation for the proposed project, if at all? In addition, if the house is to be restored in a similar fashion to the barn, the applicant should provide the Planning Board with written concurrence from the SHPO that the proposed restoration is acceptable.
- Response 2.31 7. The Applicant envisions the residential lots to predominately serve as second home investment properties for New York City renters. The Applicant does not envision year-round permanent occupancy. As lead agency the Planning Board is permitted to request analysis of impacts associated with year-round occupancy as part of the FEIS, if determined warranted during the public review of the DEIS. Similar comments were raised by the Planning Board and during the public hearing.
- Response 2.32 8. Why is the area of the project site just north of the Horton Road cul-de-sac and south/east of Ulmar Pond, classified as “Residential Multi Family” on the existing land use map (Figure 14)?
- Response 2.65 9. The Applicant’s explanation for why the Equestrian Center meets the definition of a permitted use within a conservation easement appears to be solely based on the types of uses referenced in Town Code Section 175-21(A)(3)(b) – recreation, agriculture, etc. However, the FEIS should expand on this language and provide further justification for why the Applicant believes that the development of approximately 11 acres of the proposed conservation area with a 60,000-square-foot building and associated impervious surfaces for parking and waste management, placed between steep slopes and a pond, does not “impair the conservation value of the land,” as paraphrased from the same section of the Town Code.

- Response 2.76 10. Additional information on odor control (the use of ionizers, etc.) should be incorporated into the discussion of the proposed “open walled shed” for equine waste collection/storage. The text references a maximum on-site storage period of 14 days, and odor control is a concern that has been raised, particularly during the warm summer months when usage of the equestrian center is expected to be at its peak. This storage bin does not appear to be sealed to provide any kind of odor control (based on the figure provided). The text as well as the schematic shown in Figure 24 note that this storage bin would be 40 cubic feet in size. The rationale for sizing this container, based on the maximum of 40 horses, should also be described.
- Response 2.94  
Response 2.95 11. The FEIS should include a general summary of the Applicant’s anticipated phasing and duration of construction for all components of the proposed project, while making references to the preliminary SWPPP included as Appendix M. It is also unclear from the text if the equestrian center would be constructed before or after the homes. The FEIS should also clearly describe the Applicant’s plan for marketing and developing the residential component of the subdivision over time. Would the applicant serve as the master designer and builder for all prospective buyers, or would buyers be permitted to retain their own architect/contractor to design and build a house pursuant to prescribed design guidelines established by the Applicant/HOA?
- Response 2.100 12. The FEIS should specify whether or not blasting is envisioned as part of construction, particularly for the entrance road construction on steep rocky slopes. If blasting will be necessary, compliance with all requirements of the Town Code should be summarized in relation to the proposed project’s activities.
- Response 2.96 13. The Applicant should perform a cut and fill analysis on the latest version of the development program and include it in the FEIS.
- Response 2.79 14. The FEIS should confirm whether or not “storm drainage system” as listed among the common elements to be under control of the HOA includes the cisterns, retention basins, rain gardens, etc. proposed through the SWPPP or if some of those elements could occur on individually owned residential lots.

#### **IV. EXISTING CONDITIONS, ANTICIPATED IMPACTS AND MITIGATION**

##### *IV.A WATER RESOURCES*

- Response 2.80 15. Refer to comment #14 above. The FEIS should provide additional information on both the placement and maintenance of any proposed stormwater management cisterns, retention basins, rain gardens, etc., while making references to the preliminary SWPPP included as Appendix M. Will these facilities be solely within the common HOA lot (with stormwater conveyed through roadway drains/gutters) or will individual homeowners be required to construct stormwater management facilities on individual lots?
- Response 1.3 16. Regarding the sentence on page 66: “In this way, the project sponsor believes the pond will actually be in better condition after the project is developed than it is now,” – refer to comment #4 found above.
- Response 3A.10 17. As indicated in correspondence between the Applicant and their consultants cited within the DEIS, runoff and septic discharge from development of residential and equestrian uses and land clearing raise likelihood of increased (not decreased) discharge of nutrient pollutants which could worsen eutrophic conditions in Ulmar Pond. Pond management to avoid/minimize such impacts is proposed. The Solitude letter (2.15.18), indicates that since the 2015 pond water quality sampling was a one-time sampling event, a water quality monitoring program should be initiated to begin generating a robust baseline of data to use for the effective management of the system. No subsequent water sampling of Ulmar Pond is provided in the DEIS to support the contention that the pond is frequently eutrophic for management purposes. Despite the pond’s one-time phytoplankton bloom, fish sampling showed fish condition/health and species assemblage was high value for angling and aquatic plant sampling showed good conditions, with only trace density of filamentous algae and invasive curly-leaf pond weed. Similarly, the Clove Creek macroinvertebrate sampling showed an even mix of

species indicative of a generally healthy system. Protection of the pond and creek with proper site design are of utmost importance. Consideration should be given to further minimizing proposed development around Ulmar Pond to the maximum extent practicable. The incorporated letter from Allied Biological (6.29.15) says, "It's likely that if the land around the pond is developed, the impairment could intensify, which could lead to the collapse of one or more of the biological communities." We agree. Additional use of and development around the pond present the possibility that the pond will be degraded, unless clear restrictions are placed on pond use, on the density and distance of development, and on the mitigation measures (new vegetated buffers, etc.) proposed to protect it.

- Response 2.77
18. Page 70 of the DEIS indicates that the entirety of the equestrian center, including all outside riding and paddocks, would be lined with an impenetrable barrier to capture runoff/leachate. This is a considerable acreage of impermeable surface that may create a runoff attenuation (or leachate capture) issue. By reducing potential impact to groundwater this approach may unnecessarily increase the size of stormwater management facilities on site. The FEIS should provide additional information on the comparison of impacts to groundwater vs. impacts to stormwater with or without the impermeable layer proposed for installation beneath the outdoor equestrian facilities. Has the SWPPP accounted for flow volume/rate that would result from the installation of this impermeable barrier? Will runoff collected from outdoor riding/paddock areas be diverted to the non-point surface water detention basins or will it be treated with septic flows? This issue speaks to the complexities of properly managing runoff from equestrian uses. This issue must be referred to the Town Engineer.
19. AKRF will defer to the Town Engineer for any additional substantive comments related to the analysis of water resources in the DEIS, including review of the SWPPP presented in Appendix M.

#### *IV.B VEGETATION AND WILDLIFE*

- Response 3B.1
20. The following ecological reports have been completed for the project site by the current and former property owner. Please verify that this is a comprehensive list:
- a. Phase I Biodiversity and Environmental Assessment. Stephen Coleman. 11.16.09.
  - b. Additional Environmental Studies. Stephen Coleman. 7.1.10.
  - c. Response to DEC comments. Stephen Coleman. 3.24.11.
  - d. Additional Field Assessments. Stephen Coleman. 7.12.11.
  - e. Timber Rattlesnake Habitat Assessment Report. Brandon Ruhe. 8.25.14 (revised 9.11.14).
  - f. Wetland Delineation & Environmental Assessment Report. Stephen Coleman. 9.15.14.
  - g. Limnology/WQ Report. Chris Doyle (Allied Biological). 6.29.15.
  - h. Natural Resource Investigation. Hudson Highlands Environmental Consulting - Stephen Gross, Randy Stechert, Donald Smith. Joan Hansen. 8.12.15.
  - i. Regarding Ulmar Pond Lake Mgt. Chris Doyle (Solitude). 2.15.18.
- Response 3B.14
21. Ecological analyses should include a vernal pool study conducted during the appropriate season (March/April). If a vernal pool(s) is present, protection of forested buffers should be provided, in accordance with MCA Technical Paper Series: No. 5. Conservation Pool-Breeding Amphibians in Residential and Commercial Developments in the Northeastern United States. (Klemens and Calhoun, 2002). This issue had been raised by the Planning Board and others during the completeness review.
- Response 3B.15
22. There is no detailed description of each ecological community (habitat cover type) corresponding to the communities shown in Figure 26 in the DEIS. Instead, there is a general description of the forest communities at page 79 describing the overall site. In order to gauge habitat impacts from the proposed project, the vegetation cover types shown in Figure 26 must be reconciled with:



- a. The previously demarcated “potential development area” mapped by the conservation analysis completed for the site;
- b. The previous habitat descriptions of the site provided by ecological consultants (Coleman, Ruhe, Hansen); and,
- c. The sometimes low habitat-value descriptions due to non-native species colonization provided in the DEIS chapter. While the descriptions provided under “vegetation associated with seeps” and “vegetation along stream corridors” (p.80) are helpful and specific, the vegetation description under “upland deciduous forest community” (p. 77 and 79) does not clearly indicate how/if it corresponds to the habitats shown in Figure 26: Vegetation Associations.

Response  
3B.7

23. The general picture of onsite habitats is clear. As described in the DEIS (p.79), “deciduous forests occur on more than 90 percent of the property” and (p.80) “...exotic species were found...surrounding the eastern access road...from Horton Road...and near Ulmar Pond. Portions of the property further removed from these areas...were occupied by native species generally absent of exotic species.” Studies completed for the site by the current and previous property owners confirm this, indicating that the forest overstory on the majority of site is comprised of native species (oak, hickory, maple, tulip poplar) and that the understory is primarily native as well, with such species as maple-leaved viburnum, witch hazel, striped maple, low-bush blueberry, Christmas fern, etc. Where non-native species occur, these are typically Japanese barberry and garlic mustard at lower elevations. Despite this general picture, the extent of the non-native species colonizations on the site, and their adverse effects on habitat value cannot be measured from the information provided due to the sometimes conflicting record of information from past studies and due to internal discrepancies of habitat character/composition in the DEIS. The reason this is important to clarify is due to the frequent characterizations of onsite habitat as being low value due to non-native species colonization which is cited as minimizing the effects of the proposed development. For example: “The layout avoids those areas that are least disturbed and occupied by a community of native plant species...” and “those areas infested with exotic plant species can be developed with the least environmental impact.” (p.94); “The highest incidence of prior disturbance on the project site occurred within the areas now proposed for development, which had been historically subject to human occupation. Moreover, the proposed area of development has already been heavily impacted by the intrusion of invasive species.” (p.96); “The proposed development has been placed within the portion of the project site closest to Route 9 and neighboring residential development. This area is already considered especially impacted by its proximity to these features, as well as due to existing site disturbances including occupied structures, roadways, cleared areas, and vegetated areas that are heavily compromised by exotic invasive species.” (p.103). Descriptions in the DEIS, and in the past ecological reports that accompany the DEIS, do not fully support these characterizations.

Response  
3B.8

24. Non-native species such as Japanese barberry (*Berberis thunbergii*) and Japanese stiltgrass (*Microstegium vimineum*) occur frequently in forested habitats of the Hudson Valley. Their adverse effects on habitat value are typically minor unless they crowd out large expanses of other vegetation in all strata, which does not appear to be the case at the project site. In sum, the frequent focus in the DEIS on the adverse effects of non-native plant species appears over emphasized. The Town could consider enlisting the services of an independent ecological consultant to verify the ecological community types onsite, particularly within the footprint of proposed disturbance. In this way, the conflicting record of habitat value can be reconciled and project impacts properly gauged.

Response  
3B.2

25. As discussed further below, keeping the proposed site plan to the more disturbed portions of the site where historic development and past surface disturbance occurred is appropriate. However, the proposed site plan extends beyond these areas into portions of the site with higher habitat value. This is not made clear in the DEIS and should be fully addressed in the FEIS.

- Response 3B.3 26. Coleman (11.16.09) identified “rocky well drained upland consistent with a Chestnut-Oak Forest and Oak-Tulip Forest...also exhibits species representative of the Appalachian Oak-Hickory Forest also described by Reschke 1990.” However, presence of these NYSDEC-designated ecological community types onsite is discounted in the DEIS.
- Response 3B.4 27. Coleman (9.15.14) identified “a plateau area just northwest of the pond consists of rolling, elongated ridge....species composition similar to an Appalachian Oak-Pine forest (Reschke 1990) which is dominated by white pine, black cherry, black oak, red maple, sugar maple, red oak and Christmas fern.” This habitat type is not listed in the DEIS.
- Response 3B.5 28. Coleman (11.16.09) finds Acidic Talus Slope ecological community type onsite, located “at the southeast end of the study area at the constriction point before entering the eastern portion of the lot (Parcel “A”).” This community is not mapped/described in the DEIS.
- Response 3B.9 29. The 8.12.15 vegetation survey says the project site examined ranged in elevation from 360 to 500 feet at the property boundaries – but the site elevation reaches 800 feet. Please verify that the survey examined the entire site or if just a portion the project site was assessed.
- Response 3A.25 30. Section B.1.a (p. 80) indicates that two (2) hillside seeps were found, “both on the slope east of the cleared area”. One at the north end of the cleared area (Area D on Figure 26), and a larger one at the south end. These are fragile habitats that are an important resource for water dependent wildlife. Additionally, these seeps as described have hydrophytic vegetation (*Juncus*, *Carex*, *Sphagnum*, *Symplocarpus foetidus*, *Impatiens capensis*, etc.) and are connected via surface flow to onsite wetlands – why were these seeps not flagged as wetland themselves? The DEIS must clarify if any portion of these two hillside seeps is located within the proposed development footprint. Both seeps must be located accurately on map/figure (at present they are not) and, as discussed above, they must be delineated/flagged as wetland if they meet the USACE 3-parameter approach. The development footprint must be adjusted to avoid these seeps and each should be provided with an appropriate buffer. This comment was conveyed during the DEIS completeness review and remains unaddressed.
- Response 3B.54 31. Forest fragmentation is too narrowly defined in the DEIS. (p.94-99). Considering the project site alone, which is the only scale of analysis presented in the DEIS, the proposed site plan does not bifurcate the project site itself but instead reduces it in size by developing its western and central portions, leaving the easternmost parcel undeveloped. While this would not fully divide the project site into two or more non-contiguous fragments (the DEIS’s definition of fragmentation) it substantially reduces the amount of closed-canopy forest on the project site and furthers habitat fragmentation at the local and regional scales. We encourage the applicant to look more broadly at the definition of forest fragmentation, at the parcel-scale, site-scale, local-scale and regional-scale, and its adverse effects. The project site is part of a larger comparatively contiguous closed canopy forest that spans the boundaries of the site.
- Response 3B.55 32. The project site is part of the Hudson Highlands ecozone, comprised of substantially contiguous blocks of forest through which local roads, trails, and scattered development occurs. With development, the project site becomes a smaller “fragment” in this regional forest. With each development/encroachment/reduction of the blocks that make up this regional forest, the potential spread of invasive plants and animals increases in the remaining (unaffected) forested land. This is true for the proposed project, by bringing development closer to the eastern portions of the site the remaining forested land will be reduced in size and what is left will be unbuffered to the west. The remaining forested land will not serve the same ecosystem services to the same extent that it does at present, including the likelihood that this remaining forest will provide viable habitat for increasingly rare plants/animals that require larger tracts of land to thrive. To the contrary, the DEIS suggests that development of the western half of the site will have minimal effects on the remaining forest. The proposed development will expand the area of indirect impacts (nest parasitism, pet predation, invasive plant colonization, light and noise impacts, etc.) that the DEIS indicates occurs on portions of the western-half of the site by Route 9 at present, further eastwards into less-disturbed forest. Suggestions

in the DEIS that adverse effects to the 90% closed-canopy forest that occupies the site will be minimal are unsupported – at p. 104: “New development on land adjacent or close to existing development has very limited impact as the habitat of these areas is already significantly impacted by existing adjacent or nearby development.” And at p. 96: “In addition, the forested area proposed for development is already impacted by the “fragmenting effect” of the noise from nearby Route 9, which has been found by researchers to extend anywhere from 250 meters to 1000 meters due to road noise.” These statements are inaccurate. The applicant cannot contend that only portions of the site reduced in value due to proximity to Route 9 and historic homesteads will be affected and yet ignore the spread of “compromised” habitat that will result from the proposed new development. The DEIS concedes this point elsewhere, at page 96: “The proposed development will have the impact of extending the fragmenting effect farther in the direction of the unfragmented forest.” We agree with this statement.

33. To illustrate the importance of scale to the question of forest fragmentation: Of the six tax parcels that comprise the project site, the proposed site plan largely develops or bifurcates five of them, with only the final parcel acquired by the project sponsor remaining undeveloped, lot #17.-1-76.111. Thus, considered at the “parcel scale”, the proposed site plan causes substantial fragmentation. At the local scale, considering the project site’s relationship to immediately adjacent parcels, surrounding land is largely forested with only local roads and scattered low-density development to the north and east. The proposed project will widen the suburban land use cover type along Route 9 substantially, furthering the reduction in the block of local-scale largely contiguous forest that extends from the project site eastwards into these adjacent forested lands, including Fahnestock State Park. Finally, at the regional scale, the proposed project will reduce the finite acreage of undeveloped forested habitat that comprises the Hudson Highlands ecozone. The DEIS focuses on fragmentation at the project-site scale, but must also consider the bigger picture. This is not to say that the project site must remain undeveloped. Rather, the lead agency must consider these adverse effects from forest fragmentation which have not been presented fully/at all appropriate scales in the DEIS.
34. Related to the issue of forest fragmentation is its relationship to surrounding forest community types. As discussed in the DEIS, the project site is located adjacent to two NYNHP-mapped/designated “Significant Natural Communities (SNC)”, specifically a “high quality occurrence” of the “Appalachian Oak-Hickory Forest” community and the “Chestnut Oak Forest” community. Clearly, based on species descriptions provided in the DEIS these two ecological community types occur within the project site itself. Despite the fact that these community types are described as intermixed with other plant assemblages, the argument can clearly be made that the project site contributes to the “matrix” of forest that surrounds the NHP-mapped Appalachian Oak-Hickory Forest and Chestnut-Oak Forest.
35. The NYSDEC Hudson Valley Natural Resource Mapper maps the project site itself as part of the following two forest habitat designations: “Matrix Forest Block” and as part of the most critical “Large Forests: Globally Significant (>15,000 acres)”:
- a. Matrix Forest Blocks: Matrix forests represent the largest, most intact forests in the northeastern United States, whose size and natural condition allow for the maintenance of ecological processes, forest communities, and populations of forest-interior species. Conserving large, high quality forests and connections between them will allow plants and animals to move north and higher in elevation as the climate warms. (Publisher: The Nature Conservancy Eastern Conservation Science and the New York Natural Heritage Program. Publication Year: 2006).
  - b. Large Forests: The Hudson Valley is largely forested, but forest patches differ in relative ecological significance based on size, connectedness to other forest patches, and other factors such as invasive species and deer browse. In general, larger forests provide greater ecological value than smaller, fragmented patches, and many wildlife species depend on intact forests of at least 200 acres with little or no human development. Smaller forests may nevertheless provide important habitat values and stormwater-related benefits.

Response  
3B.56

Response  
3B.57

Response  
3B.58



(Publication: This layer was created from 2010 land cover data developed for the National Oceanic and Atmospheric Administration's Coastal Change Analysis Program. 2015).

The project site's connection to these Matrix and Large forest NYS-mapped designations is also evident when examining aerial photos contained in the DEIS and larger-scale aerial imagery. However, at p.94, the DEIS states: "Approximately 16 acres of forest with an oak-hickory association will be disturbed as part of the proposed project, but this forest should not be considered as part of the Appalachian oak-hickory matrix forest. Contrary to being a matrix forest, this particular forest type was observed on the property in smaller, fragmented communities." This statement does not appear to be accurate, based on review of the NYSDEC-mapping of the matrix forest and aerial imagery.

- Response 3B.10 36. The DEIS (p.106) suggests that planting of native species in home landscaping will counterbalance the project's habitat disturbance and habitat fragmentation effects. In truth, roads/lawns create disturbance that facilitates the spread of invasive species even if native ornamentals are required by HOA guidelines. Such measures, if judiciously enforced for the life of a project, can only hope to minimize the spread of invasive species.
- Response 2.101 37. The applicability of the Town of Philipstown Code's 175-36 – Steep terrain and ridgeline protection regulations, is not provided/calculated in the DEIS. This analysis is necessary to make an informed decision about the location of the overall development program with respect to steep slopes.
- Response 3B.6 38. Based on information presented in the DEIS and appendices, AKRF is in agreement with the general findings of the Conservation Analysis, namely that the higher value conservation land consists of the less-disturbed forested lands within the more steeply sloped, eastern regions of the site and the lands proximal to Clove Creek and Ulmar Pond in the western and south-central portions of the project site. Retaining the eastern forested areas undeveloped in a conservation easement will help preserve the large contiguous forested lands extending east/south offsite which are of particular ecological and conservation value to the Hudson Highlands region. Protecting the wetlands on the southern portions of the site and providing large undisturbed buffers adjacent to Clove Creek and the Ulmar Pond will benefit water quality and preserve plant/animal diversity. However, we feel that more must be done to achieve a site plan that adequately accomplishes these goals.
- Response 3B.11 39. The site plan footprint (limit-of-disturbance) presented in the DEIS is larger than the plan presented in December 2016 immediately after completion of the approved conservation analysis, notably at: the location of three stormwater detention basins flanking the entrance road within Oak and Tulip Poplar-Hemlock-Hickory-Oak habitat types (Figure 26); at the first turn of the loop drive within Oak and Sugar Maple-Black Birch-Tulip Poplar-Hickory-Oak forest; at the emergency access road traversing the oak community in the northern portion of the site, and; at the Equestrian parking and new cul-de-sac for three residences at the easternmost portion of the site plan within Tulip Poplar-Sugar Maple-Oak and Sugar Maple-Black Birch-Tulip Poplar-Hickory-Oak forest. These changes are moving the site plan in the direction of greater ecological impacts, not reduced impacts.
- Response 4.1 40. The proposed site plan resembles large-lot residential and should be further reduced in footprint to constitute a true cluster subdivision. With a community septic system, as is proposed, it appears that significantly more centralization/consolidation, i.e. more cluster, could be achieved than is proposed at present. Such consolidation will undoubtedly improve habitat preservation in-line with the identified conservation values of the land as explored in the Conservation Assessment and DEIS. The proposed Alternative D, Cluster Subdivision with ½ acre lots, offers some benefit by preserving more of the terrestrial-aquatic habitat linkages by eliminating houses around Ulmar Pond and eliminating one of the two drives off Horton Road, but does not substantially reduce impacts to the onsite habitat overall and adds a longer cul-de-sac extending northeastwards. A cluster layout alternative more protective of onsite habitat is warranted.
41. The following components of the proposed site plan should be reconsidered to reduce the site plan's ecological impacts:



- Response 4.2
- a. Emergency access roads to north connecting with East Mountain Road and two roadways to south connecting with Horton Road appear redundant, and fragment the oak-dominated uplands from the more mesic, lowland forest and wetlands/streams to the south/west. Removing two of these roadways, most critically the southern drives that sever the connection between upland and wetland, is advised to retain critical movement of animals between aquatic and terrestrial habitats.
  - b. Onsite roadways need animal crossing tunnels (box culverts) especially at stream/wetland crossings to facilitate movement of animals from uplands to downslope wetlands. Similarly, such features as Cape Cod Curbing to reduce reptile/amphibian mortality is advised.
  - c. Lots 24, 25, 18, and 19 should be moved/removed/consolidated to preserve connectivity between Ulmar Pond and surrounding upland habitat.
  - d. Lots 13, 14, 15, 16, and 17 should be moved/removed/consolidated to protect less-disturbed, oak-dominated forest and reduce forest fragmentation.
  - e. Lots 9 and 10 should be moved/removed/consolidated to protect oak-dominated rocky spine exhibiting potential timber rattlesnake and/or copperhead foraging habitat identified by Coleman.
  - f. The Equestrian Center and its parking/amenities should be moved more centrally (northwestwards) to widen the habitat corridor between upland and wetlands (and Ulmar Pond).
- Response 2.27, 2.24
42. Regarding residential density, and the site plan modifications recommended above, please note, from Town Code Section 175-20 – Standards for Conservation Subdivisions: “(5) The maximum number of units as determined by this §175-20B, whether derived from the density formula or the yield plan, and the density bonuses described in Subsection B(4) shall not be considered an entitlement. The applicant must also demonstrate compliance with all applicable criteria and standards of the Zoning Law, Land Development Regulations, and other applicable laws and regulations. These requirements may result in an actual approvable unit count that is less than the maximum allowed by Subsections B(1), (2) or (4) above.”
- Response 2.45
43. Refer to comment #9 above. The DEIS indicates that the proposed 170.8 acres of Conservation Area includes the Equestrian Center, the SSTS and Reserve SSTS areas. Such areas are essentially “developed” and not appropriate to include in the Conservation Area. Per Town Code §175-21.A.3.a/b, uses allowed in conservation easement must “protect the conservation values identified in the conservation analysis.” Conversion of forested land, with its well-documented conservation values, to an indoor/outdoor riding rings, horse boarding stalls, roadways and parking, and sub-surface septic treatment systems does not further the conservation value of the land. Note also Town Code §175-20.H.2: “Such open space may be owned by a homeowner’s association...as long as it is protected from development by a conservation easement and does not result in fragmentation of the open space land in a manner that compromises its conservation value.” The Equestrian Center and SSTS, and their related developed areas, do not appear compliant with this section of the Town Code.
- Response 2.46
44. Appendix K: Conservation Easement: Section 4.3(d) Pedestrian Trails, Utilities and Drainage Ways. This section is not restrictively defined so potential impacts to undeveloped lands are unknown. Also, Section 4.6 Clearing of Trees and Vegetation, is similarly poorly defined for conservation lands which are to remain undisturbed. By contrast, Section, 4.2 Equestrian Center, is clearly defined and appropriate: “Horses and horseback riding shall be permitted only in the 11.1 acres of the Equestrian Center, in all other areas horses of the Property and the Conservation Subdivision horseback riding shall be prohibited.”
45. Some figures (e.g. Fig 19) show the limit-of-disturbance (LOD) line including the SSTS Reserve Area, several do not (Figure 30). Some appropriately show the LOD including the proposed residential lot-

- Response 3B.12 lines as the boundary of potential disturbance (Fig 30), others do not (Fig. 19, Fig. 20, Fig. 33). The LOD must include the outermost grade lines and the entirety of the residential lots to account for potential future disturbance. Despite the best intentions of HOA Declarations, individual homeowners may clear to their lot lines in the future to the detriment of the intent of the Conservation Subdivision. No portion of the residential lots is within the proposed Conservation Easement area (Fig. 17) so their future development is a potential reality. In order for the lead agency to measure the potential adverse environmental effects of the development, the FEIS must make clear and consistent how much acreage will be disturbed/preserved at the outset of development plus what additional lands could be disturbed in the future due to the reserve SSTS and future homeowner clearing, in graphical and table form.
- Response 3B.16 46. Although there is some disagreement between the studies completed to date on the project site regarding the potential presence of the timber rattlesnake (*Crotalus horridus*), studies presented by Coleman/Ruhe and the Conservation Findings (Appendix B, p.5) indicate that at minimum the site may provide summer foraging habitat for this species. Considering the varied record, the lead agency will find it difficult make its own determination on the proposed project's potential effects to this NYS "threatened" species. Therefore, the Applicant should implement the Mitigation Recommendations of NYSDEC's "Guidelines for Reviewing Projects for Potential Impacts to the Timber Rattlesnake" for the protection of timber rattlesnakes during construction of the proposed project.
- Response 3B.17 47. The DEIS at p. 87 (B.1.b.iii) does not provide the USFWS summer roosting season tree removal restriction dates for the federally "endangered" Indiana bat (*Myotis sodalis*), which is April 1 to September 31, depending on distance to hibernaculum. (USFWS NY Field Office, Indiana Bat Project Review Fact Sheet).
- Response 3B.18 48. Regarding forest interior-nesting birds, this ecological function would be adversely affected by the proposed project and should be termed an unavoidable adverse impact. The suggestion that such impacts can be "remediated...by landscaping with trees and shrubs native to the area..." (p.106) is not accurate.
- Response 3B.19 49. Insufficient analysis is provided regarding adverse impacts, and potential impact avoidance measures, to the State-protected or rare wildlife species identified or expected to occur onsite based on available habitat. These include northern copperhead snake, eastern hognose snake, eastern worm snake, eastern box turtle, wood turtle, and red shouldered hawk. For example, eastern hognose and worm snakes are found in old field habitat – however, it appears the majority of this habitat is to be developed. True cluster development to preserve specific habitat areas, and measures to preserve existing upland-wetland linkages are among those that should be further examined in the FEIS in reference to these species.
- Response 3B.20 50. At pg. 106: "Constricting light and sound disturbance has also been shown to lessen the impact of development." Aside from citing the existing site topography, no specific measures proposed by the Applicant to minimize lighting/sound are discussed.

#### IV.C - ZONING AND LAND USE

- Response 3C.1 51. Figure 20 from the Water Resources section of the DEIS shows the boundaries of the Clove Creek Aquifer and Regional Aquifer subdistricts of the Town's Aquifer Overlay District in relation to the project site and proposed limits of disturbance, but they are not shown as overlays on the zoning map (Figure 8) nor are they discussed in the text on existing zoning conditions on page 108 – only the Open Space Overlay is mentioned. The FEIS should describe the applicability of the aquifer overlays on the proposed project and how the project will comply (i.e. the requirements of Town Code section 175-16 and the special permit approval necessary).
- Response 3C.2 52. The two paragraphs on the top of page 112 include repetitive language when referring to the 11.1 acre area of the project site proposed for rezoning from M to RR and subsequently planned for conservation purposes. If this language will be used in the FEIS, please consolidate the language into one paragraph as follows:

"The 11.1 acres of this property is categorized as having a high or medium conservation value, with 2.0 acres categorized as having a high conservation value and 9.1 acres categorized as having a medium conservation value. This land is adjacent to Clove Creek and fronts Route 9 and contains steep slopes, wetlands, and significant water ecology, making it unsuited for most uses permitted in the M district. Rezoning the 11.1 acres from M to RR will allow the Applicant to designate this portion of the property, except for the area needed to accommodate the road that is necessary to access the developed areas of the Reserve, as open space and preserve it under a conservation easement. This action will allow the property to be compatible with the surrounding area and future development."

#### IV.D COMMUNITY CHARACTER

Response  
2.89

53. Regarding this language on page 120: "...the applicant's designers made certain that Horton Road and East Mountain Road North would not be used for any routine access to the project. It is noted that access to both of these Town roads will be maintained for emergency purposes only..." - how have the applicant's designers made certain that these critical roads will not be used for routine access, and will solely be used for emergency purposes? For example, have the designers included barriers or automated gates along the periphery of those roads with access only for emergency personnel? Please include more information on how this has been made certain, and how the current plan is code-compliant with the minimum design requirements for emergency access.

Response  
3D.11

54. Page 135: Similar to how other viewpoints are presented graphically in this section of the DEIS, a panoramic photograph depicting the view of the project site from Scofield Ridge should be incorporated into the FEIS to accompany the plan and profile section diagram already included in Figure 36. The text included in the third paragraph of page 135 is not fully supported by the plan and profile section drawing, and inclusion of a panoramic photograph of this viewpoint would provide further context for the lead agency to draw conclusions. This issue has also been raised as a concern during the public hearing.

#### V. ALTERNATIVES

Response  
4.3

55. Similar to the conclusive statements in terms of project viability for Alternatives A, C, D, and E, Alternative B should include a conclusive statement on whether this alternative is economically viable or not and what the environmental impacts would be. A few sentences would suffice, however this comparison is crucial for readers when evaluating the different alternatives and their impacts in comparison with each other.

Response  
4.4

56. In Alternative D, the applicant states that, "the lot size would be reduced from around one acre to one-half acre...the area of disturbance would be reduced to 42.8 acres from 45.7 acres, thereby reducing the overall environmental impact from the project by just 2.9 acres...the amount of impervious surfaces would also be reduced to approximately 8.6 acres, or just about 2.5 acres less than the current proposal." There is barely a difference between the Alternative D cluster subdivision, with smaller lots and relocation of homes, and the proposed plan. The definition of a cluster development, as stated in Town Code Section 175-11, is a development that "clusters in nodes surrounded by open space and, where practical, in the traditional compact pattern found in the Town's hamlets." Clustering is intended to help create smaller, more compact development in areas away from environmental constraints, and is a planning technique often used to preserve open space. Here, the clustering only shows a 2.9-acre reduction in environmental impact and a 2.5-acre reduction in impervious surfaces, both of which should reflect larger reductions. AKRF does not agree that Alternative D qualifies as a cluster subdivision, as it does not show the elements of proper clustering to qualify. The Applicant should create a proper cluster subdivision that reflects the principles of 'clustering' and a larger preservation of open space.

57. Alternative D assumes the loss of potential value of homes. How are the projections of potential loss of value percentages derived? The FEIS should provide calculations or a basis for the projections. The Applicant states that, "based on the projected asking prices for the lots around Ulmar Pond and those

Response 4.5 elsewhere in the proposed subdivision, it is estimated by the Project Sponsor that the impact on the potential value of the homes removed from around Ulmar Pond would be a loss of about 65%. Based on the asking price the Project Sponsor would place on a half-acre lot compared to the one-acre lots, the loss of potential value for the other homes is projected to be about 40%." Other than stating that the Project Sponsor estimates these numbers, the text has not provided calculations or a basis for the projections for these values. Please provide the calculations, and research behind these projections in an Appendix and reference them within the text.

Response 4.6 58. Alternatives B, D, and E require a fiscal analysis for the residential development, similar to what has been provided for the equestrian facility in Alternatives C and E. It is important for readers to know how much projected revenue will be generated from these different alternatives given the varying scenarios with and without the equestrian facility. Please provide the fiscal analysis for each alternative in an Appendix and reference these findings within the FEIS.

#### **VI. ADVERSE ENVIRONMENTAL IMPACTS THAT CANNOT BE AVOIDED**

Response 5.1 59. According to Chapter 5 Section C.35 of the SEQR Handbook, "certain adverse environmental impacts can be expected to occur regardless of the mitigation measures employed; for example, there is typically permanent loss of vegetation when building a new facility and any related parking. Because such unavoidable impacts must be factored into final agency decision making, the SEQR regulations provide that an EIS must contain an identification and assessment of impacts that cannot be avoided or adequately mitigated. The discussion of unavoidable impacts must meet the same substantive requirements as all other discussions of impacts and alternatives." For example, the applicant should note a permanent loss of 11.1 acres of existing vegetation, instead of 'removal of 45.7 acres of existing vegetation of which 34.6 acres would be replaced with lawn and landscaping.' The applicant should review the bullets listed in the DEIS, and include just those from each section of the DEIS where impacts are unavoidable and where the proposed mitigation will be unable to offset the unavoidable impacts. In addition, the FEIS should specify which adverse environmental impacts cannot be avoided in the short-term versus long-term. This comment was previously included as part of AKRF's completeness review memo and has not yet been addressed.

Response 5.2 60. The FEIS should separate the adverse environmental impacts in bullet points into topics or categories and expanded upon why they are unavoidable. This comment was previously included as part of AKRF's completeness memo and has not yet been addressed.

#### **VII. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES**

61. We have reviewed this material and have no substantive comments on this chapter.

#### **VIII. GROWTH INDUCING ASPECTS**

62. We have reviewed this material and have no substantive comments on this chapter.



Heidi A. Wendel and Joseph L. Hirsch  
29 Secor Street  
Nelsonville, NY 10516  
Heidi.wendel@gmail.com  
Joehirsch6@yahoo.com

July 3, 2019

BY EMAIL TO SECRETARY OF THE BUILDING DEPARTMENT

Town of Philipstown Planning Board  
238 Main Street  
Cold Spring, NY 10516

Re: **Opposition to Hudson Highlands Reserve Application**

Dear Planning Board,

We are writing to express our vehement opposition to the application by the Hudson Highlands Reserve at Route 9 and Horton Road. We oppose the project, as proposed by the applicant, for all of the reasons expressed by the public commenters at the Public Hearing on June 20, 2019, as well as for the reasons set forth in the Hudson Highlands Land Trust's ("HHLT's") letter regarding the application, and for the reasons set forth in the Perspective by HHLT President Michelle Smith in the PCNR.

Among other reasons (set forth in the above-cited documents and other parts of the record, such as the video of the public comments at the hearing cited above), we oppose the project as follows:

- Response 2.17, 3B.65**

  - The applicant should not be permitted to take advantage of Cold Spring's Conservation Subdivision law to include more houses than would be permitted in a regular (non-conservation) subdivision, because the project does not fall within the spirit of the Conservation Subdivision provisions. The project should be treated for what it is, a non-conservation subdivision, and should not be permitted any additional residences beyond what it could include under that law. Further, a project of any size must be required to cluster the housing and provide a true conservation easement that would ensure genuine preservation and conservation of the vulnerable land in question, and no deterioration of habitat for wildlife. The existing conservation easement is currently proposed for the areas of the site that are the least valuable for wildlife use. A true conservation easement would instead allow wildlife to co-exist with housing on the site.
- Response 3B.54, 3B.34**

  - The housing, as sited, blocks wildlife access to the pond by fragmenting the site.

Response  
3B.14

- The applicant has not conducted an adequate study of wildlife on the property, including the location of vernal pools that provide habitat for peeper frogs, salamanders and other amphibious and reptilian life. Such studies would have to be done in March, April and May, when the vernal pools come to life. During that season of each year, thousands of peeper frogs hatch. Their haunting calls help provide an idyllic soundtrack to our area's natural beauty. The sound of the peepers in spring is a powerful reason many are drawn to live in the Hudson Valley, as we were (we live across from a vernal pool). If an adequate study of the effects the proposed development will have on the vernal pool wildlife shows that the project will harm amphibian life on the site, then the board must deny the application.

Response  
2.64

- The proposed equestrian center amounts to a commercial operation that will bring even more traffic to the area's already choked roads. That will unquestionably lead to even more serious accidents than already occur there. Emergency services that serve the area are already enormously overburdened.

Response  
2.75

- The equestrian center, as proposed, would create inhumane conditions for horses, who would apparently be stabled for their entire lives. According to the existing proposal, each horse would have a range of slightly less than a quarter acre to graze and roam during its rare time outdoors. That is a sliver of the acreage a horse needs. Additionally, the manure the horses produce will heavily pollute the land that surrounds the center, as well as the streams, pond, vernal pools and wetlands, and will decimate nearby wildlife.
- Horses already go begging around Cold Spring. Owners of existing equine establishments trying to offload their horses are legion in our area. We need fewer of these, not more.
- The applicant has been unable to negotiate with any party willing to accept custody of the conservation easement.

Response  
2.34

- The applicant's proposal to have a homeowner's association oversee and enforce whatever site conditions are proposed to protect the site's environment is a non-starter. There is no assurance a homeowner would have the qualifications or ability to do so. The fall-back that a lawsuit could be brought if conditions are not followed is inadequate. The proposal should not be dependent on neighbors or other affected parties having to sue over detrimental effects of the project that should have been avoided in the application in the first place.

For these reasons, and all the others cited in the documents and at the public hearing, we strongly request that the Planning Board deny the application by the Hudson Highlands Reserve.

Sincerely,

Heidi Wendel and Joe Hirsch

Cc: Chairman of the Planning Board

July 3, 2019

Anna and Paul Kantor  
17 Yesterday Drive  
Cold Spring, NY 10516

Email: [pkantor1@optonline.net](mailto:pkantor1@optonline.net)

Philipstown Planning Board  
Town of Philipstown  
238 Main Street  
Cold Spring, NY 10516

Dear Planning Board Members,

We wish to express our profound opposition to the pending proposal for the Hudson Highlands Reserve that is now before the board. We attended the public hearing on June 20, 2019 because this matter is of utmost importance to us as homeowners at Glassbury Court, located nearby the proposed Conservation Subdivision. After reading most of the documentation available through the town hall and listening to the many criticisms leveled by diverse parties at the hearing, it is difficult to imagine a worse development proposal. Unlike Glassbury, which transformed a run-down quarry into a bright, attractive and socially useful addition to the Highlands, the HHR plan has few redeeming features. As specified in the planning materials, this development proposes to transform a pristine and ecologically important area of the highlands into a hideous commercial and residential enclave. The HHR will bring into a delicate ecological environment a large polluting commercial horse-riding business that is harmful to wildlife that will stand out as an anomalous scar in an otherwise green and pleasant setting. A wide variety of critics have pointed out the enormous increase in traffic that will result from this development, as well as the substantial pollution of land and water in our neighborhood by a large concentration of horses feeding and excreting.

The residential parts of this development are also questionable. Unlike Glassbury, which has added significantly to the area's housing stock with more than 90 homes dedicated to underserved residents (seniors and civil servants), the HHR proposes 25 homes aimed at the luxury market and part time residents seeking weekend retreats. The ill-conceived housing plan has been judged to choke off access by valued wildlife to critical ponds and waterways, while only leaving less valuable (to wildlife) landscape on surrounding slopes. Although the area should be open to weekenders, it should not be at the price of accommodating a large quasi commercial development that has so many negative consequences for the environment.

We strongly urge the board to reject this development proposal since it clearly is not in the public interest.

Sincerely

Paul and Anna Kantor

**Subject:** DRAFT ENVIRONMENTAL IMPACT STATEMENT- Hudson Highlands Reserve

**From:** Martha Ferris <marthaferris1@gmail.com>

**Date:** 7/2/2019, 12:34 PM

**To:** amerante@philipstown.com, tpercacciolo@philipstown.com

July 2, 2019

Anthony Merante, Chairman  
Planning Board  
Street

Philipstown  
238 Main  
Cold Spring NY 10516

**RE:** Hudson Highlands Reserve – Draft Environmental Impact Statement

Dear Chairman Merante and Honorable Board Members –

Thank you for welcoming public comments on the Draft Environmental Impact Statement (DEIS) for Hudson Highlands Reserve. I understand that the development presents an important, precedent setting situation for the community. I also understand that the Hudson Highlands Land Trust opposes the current proposed plan because it fails to protect wildlife pathways and key habitat, safeguard Clove Creek and the Clove Creek Aquifer, and preserve scenic vistas from our two state parks nearby. Soon after my husband and I moved to the Hudson River Valley from Mississippi a year ago we received a welcome packet from the Hudson Highlands Land Trust with an offer for one of their local experts to visit to our property and help us identify native trees and plants and learn more about our land. We accepted their offer, and the two experts who came were incredibly generous with their time and expertise. We are deeply grateful to their organization for the important work they do to protect the precious ecosystem of the Hudson River Valley. I support their opposition to the proposed “conservation subdivision” as currently designed and hope that you will implement their eight suggested actions to remedy the deficiencies in the studies of significant impacts presented by proponents of the



development. The HHLT's actions would mitigate those impacts.

I believe that any "conservation subdivision" design in our area should be guided by proper wildlife and scenic analysis, as proposed by the Hudson Highlands Land Trust, and that includes the Hudson Highlands Reserve.

Thank you for this opportunity to comment on the DEIS.

Sincerely,

Martha Ferris Kostmayer  
40 Dancing Rock Road  
Garrison, NY 10524

PS. I will be sending you a hard copy of this letter for your records as well.

Friday, June 28, 2019

# HHR Comments/Questions

*A. Merante*

## Equestrian Facility (EF)

- "the growth and financial viability of the HHR EF is dependent on the development of an effective community riding/horsemanship program."

Response  
2.67

• What is the contemplated volume of traffic if the EF "will offer programs for both HOA members and the general public?"

• is the EF an "important part of the business in generating cash flow?"

- While most conservation easements allow agricultural uses,

Response  
2.58

• is this not an 'industrial form of agriculture?"

• is this structure allowed on preserved open space - it is a fully-developed area consisting mainly of impervious surfaces.

### Is this not anathema to the spirit of a conservation subdivision and conservation easement?

How was it determined that

"as urban incomes have grown, access to and engagement with horses on any level . ." there is a need to satisfy demand for such facilities.

Response  
2.2

"to satisfy a local need . . . facility-owned school horses in service of a comprehensive high-quality program for local children who are eager to participate in [horse activities] . . . ."

Where are the studies establishing a "public need for the project . . . ."

Response  
2.3

- Where are the studies establishing that there is a significant second-home demand in the Hudson Valley?

And a "long established pattern of second-home demand in (sic, Philipstown)?"

How is the fact that "Philipstown is part of an area that is easily reached from New York City, where city residents buy a **second** home while choosing to continue to rent in the city," relevant to the creation of a **conservation subdivision?**

Friday, June 28, 2019

Response 2.4 Is there, or has there been, an explicit call for “new housing stock in Philipstown.”

... especially on the price scale as described in the project information and on such sensitive land?

Response 2.5 ... has there been an expressed call for increased tax revenue [for what need?] -  
and what is the particular benefit of “commercial taxes?”

Anthony Merante, Chairmen

July 1, 2019

Phillipstown Planning Board

Re: Development North of GlassBury Courte 9

I would like to take this opportunity to express my opinion of this development:

1. I believe the constuction of the Twenty Five (25) homes and the the Forty Horse Stable at the above location would a hugh Negative effect on what I believe to be a pristine area.

2. A large negative impact on traffic on route 9 from increased volume from both individual and commercial vehicles i.e. horse trailers.

3. Possible impact to our Taxes due to increased population in our schools.

4. While the 25 homes may be privately owned , by the home owners, the horse stable and horses will be commercial:

a) Does this violate exiting zoning laws

b) Polution from horse waste both solid and liquid, and how does the affect our water

Response  
3A.11

table

5. How does this effect to the various wild life in the area.

Response  
2.43

6. Should the development procede who will monitor and ENFORCE and finance the so called assurances to presurve the area , envirement and property.

I coulkd go on and on but when such a large number of area residents are so opposed to this entire developement we should NOT only have the final say in this matter. I beleive the entire project should NOT BE ALLOWED.

Richard J. Pennell  
20 YESTERDAY DR.  
COLD SPRING N.Y.

June 27, 2019

Anthony Merante, Chairman  
Philipstown Planning Board

Dear Chairman Merante,

I am writing as a Philipstown resident with a longstanding interest and involvement in the Town's recreation programs. I should emphasize that I am writing as a local taxpayer and not a representative of any official entity.

I am very concerned that the equestrian facility envisaged for the Hudson Highlands Reserve Development will bring no recreational benefits or opportunities to our community. The facility as currently planned is designed for residents of the development, friends of those residents and people capable of paying the very high cost of maintaining horses trained in dressage.

Response  
3B.34  
3D.5

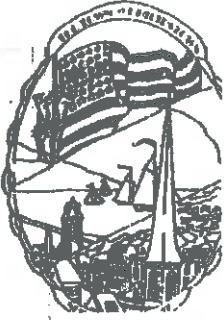
Aside from my interest in the recreational aspect of the development, as a taxpayer I am extremely worried about the impact of this development on traffic, wildlife and scenic values that we have worked so long and hard to preserve in our community.

Thank you for listening and for the valuable work you and your Board do for our community.

Respectfully,



Claudio Marzollo  
256 Lane Gate Rd  
Cold Spring



## Town of Philipstown

HIGHWAY DEPARTMENT  
50 Fishkill Road  
Cold Spring, New York 10516  
(845) 265-3530  
Fax (845) 265-7886

Carl Frisenda  
Highway Superintendent

June 25, 2019

Mr. Anthony D. Merante, Chairman and Planning Board members  
TOWN OF PHILIPSTOWN PLANNING BOARD  
238 Main Street  
PO Box 155  
Cold Spring, NY 10516

RE: Hudson Highlands Reserve Conservation Subdivision  
NYS Route 9

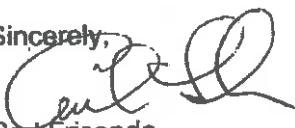
Dear Hon. Chairman and Board members:

This letter is offered to relative to the access planned for the above referenced project, which is currently before your Board. We have monitored the progress of this development proposal since it was first introduced, and have always supported the Board's initial determination that project access may only be obtained from NYS Route 9, so as to avoid any increase in traffic on the existing town roadways which abut the tract. As the Board is aware, neither Horton Road or East Mountain Road North is suited for the traffic that the 25-unit housing development and 40-stall equestrian center can be expected to generate, including horse trailers, delivery and other maintenance vehicles which will necessarily be a significant component of this development scheme.

However, it has just come to the attention of this Department that NYS DOT does not currently support project access from NYS Route 9. Be advised that this Department will continue to strongly object to the use of town roadways to serve this project. Route 9 represents the only feasible means of routine access for the scope of development envisioned by the applicant.

Should you have any questions, please don't hesitate to contact my office.

Sincerely,



Carl Frisenda  
Highway Superintendent

cc: Ronald J. Gainer, PE, PLLC

Response  
2.85

# LYNN ROGOFF

464 East Mountain Road South Cold Spring, NY 10516 M: 646-234-3336 | lrogoff@gmail.com

Planning Board  
Philipstown, NY 10516

June 21, 2019

Dear Anthony Merante, Peter Lewis, Kim Conner, Neal Zuckerman, Dennis Gagnon, Dave Hardy,

Hudsonhighlandreserve.com,  
Commercial Representations  
and Greenwashing

Ladies Gentleman, as a landowner directly bordering the development on East Mountain Road South, my argument tonight is that the entire community gave them detailed, extensive, dedicated, feedback last year in the cold winter weather. It appears that they chose rather to expand their plan and give short attention to our major concerns.

They chose not to act with any humility and thus not decrease the equestrian center numbers or the number of houses, now including indoor swimming pools, nor even bother to get approval by the DOT on the traffic on East Mountain.

They continue to claim on their website, hudsonhighlandreserve.com, that people will not use the community schools, roads and resources, but will home owners spend millions to visit only once in a while and not use community roads, schools and other resources such as water, light, wildlife and air? It does not make sense that people would pay millions of dollars and not use our community resources.

Response

3D.1

Indeed, the plan is still for 40 horses and now there are plans for commercial events and classes and manure machinery on their website. I reviewed their web site and it states "the central attraction to the development is the equestrian facility. We have determined the equestrian center, clubhouse, and paddocks to compose the amenities package for the development... including a separate building housing a second indoor arena and spectator area."

Their representations appear to use the language of environmentalism but rather MMH appears to be a case of greenwashing. Greenwashing is the practice of making an unsubstantiated or misleading claim about the environmental benefits of a product, service, and technology or company practice. Greenwashing can make a company appear to be more environmentally friendly than it really is.

**This appears to be a commercial venture built around an equestrian facility rather than a conservation subdivision.**

**I urge you to deny the HHR proposal until they modify their plan to address the concerns of our community.**

**Here are web sites that are material to our planning board long term thinking on the outlook for our community and the business model for equestrian center subdivisions:**

**[what-you-should-know-about-horse-communities](#)**

**[horse-lovers-pony-up-for-equestrian-friendly-communities-](#)**

**Best Regards,**

**Lynn Rogoff**



**Subject:** Fwd: Hudson Highlands Reserve  
**From:** Linda Valentino <lvalentino@philipstown.com>  
**Date:** 6/24/2019, 9:26 AM  
**To:** Tara <tpercacciolo@philipstown.com>

----- Forwarded Message -----  
**Subject:**Hudson Highlands Reserve  
**Date:**Tue, 18 Jun 2019 17:15:18 -0400  
**From:**Diana Hird <dianahird@me.com>  
**To:**amerante@philipstown.com  
**CC:**lvalentino@philipstown.com

Mr. Anthony Merante  
Chairman  
Philipstown Planning Board

Dear Mr. Merante:

I am writing to express my deep concern regarding the current construction plan proposed by the Hudson Highlands Reserve real estate developer. Notwithstanding the public relations spin in the real estate developer's redesigned website, the HHR development as currently conceived raises serious threats to our environment.

The areas of environmental concern are numerous. I have the following questions:

1. What is the impact of a 40-horse farm on water resources?
2. What is the impact on wildlife of the current layout?
3. What is the impact on traffic safety for Rt. 9, Horton Rd. and East Mountain Road? It sounds like they are building a commercial barn with riding lessons and riding shows which will bring in much more than just residential traffic.

I thank you for all the time and consideration you have been giving to this matter.

Sincerely,  
Diana Hird

Response

3C.4  
3B.34

Michael W. Klemens, LLC  
105 Main Street/POB 105  
Falls Village, CT 06031

June 21, 2019

Mr. Anthony Merante, Chairman  
c/o Tara Percacciolo  
Phillipstown Planning Board  
238 Main Street/POB 155  
Cold Spring, NY 10516

Dear Chairman Merante and Members of the Phillipstown Planning Board:

The Hudson Highlands Land Trust (HHLT) has submitted comments to your Board dated June 18<sup>th</sup> 2019 on the DEIS prepared for the Hudson Highland Reserve. In October 2018, on behalf of HHLT, I reviewed the extensive documentation, studies, and other materials submitted by the Applicant which are included as Appendix C of the DEIS, namely the Conservation Analysis and Environmental Assessment Form Part III.

Response  
3B.41

The Conservation Analysis and the DEIS relies upon the studies and documents that I reviewed last October. No additional studies or analyses address the issues and deficiencies that I detailed in my memorandum of October 10, 2018 to the HHLT, which is appended as Exhibit B in their submission. My academic and professional qualifications are appended as Exhibit A of HHLT's comment letter. The deficiencies that I detailed last October still remain outstanding, unresolved, and are very relevant to your evaluation of the completeness of the DEIS and its accompanying Conservation Analysis in Appendix C.

Absent addressing these issues, in my professional opinion the DEIS and its accompanying Conservation Analysis should be deemed to be incomplete by the Phillipstown Planning Board and the Applicant should be directed by the Board to conduct the necessary studies and analyses to address these deficiencies.

If I can provide any additional information to you on this matter, please feel free to contact me.

Sincerely,



Michael W. Klemens, PhD

**Subject:** Hudson Highlands Preserve Project

**From:** <msarch@ix.netcom.com>

**Date:** 6/21/2019, 12:16 PM

**To:** amerante@philipstown.com

**CC:** tpercacciolo@philipstown.com

Dear Mr. Merante:

I wanted to comment about the Hudson Highlands Reserve project, specifically about the care and well being of the proposed 40 horses. Much was said last night about their waste but what about their overall well being? Most of these equestrian developments, that are all the rage today, are built on thousands of acres of land, most of them on flat terrain, which is conducive to grazing and exercise for the horses. This site, which is wooded and on hilly terrain, has not enough flat and open acreage to be an appropriate site for proper care of 40 horses. I could see this type of project in Millbrook, or Rhinebeck, or Bedford, but not here on this site. The proposed lives of these horses, spending most of the time in their stables with food brought in from the outside, could end up becoming quite unhealthy and a form of animal abuse. I hope that this will be addressed by the applicant.

Thank you, Madeleine McGinley

Response  
2.75

# Kimley»Horn

June 17, 2019

Mr. Anthony Merante, Chairman  
Town of Philipstown Planning Board  
238 Main Street,  
Cold Spring, NY 10516

Re: Hudson Highlands Reserve  
(NYSDOT SEQRA# 14-0300)

Dear Mr. Merante:

I am in receipt of NYSDOT's correspondence on the above matter, dated June 7, 2019, and am writing to ensure that all appropriate actions have been and will be taken to continue the review process.

The applicant has been working on this project with NYSDOT since December of 2014, when the Department indicated that, subject to the submission of certain materials pertaining to the entrance road's design (detailed below), NYSDOT "would allow access to Route 9". As indicated below, the applicant subsequently completed the requested traffic-related studies<sup>1</sup> and purchased an adjacent parcel on Route 9, so that the entrance road could be better positioned by increasing the distance of the proposed entrance road from the creek.

On June 6 of 2018, the Town Planning Board sent NYSDOT a Draft Scope for the preparation of a Draft Environmental Impact Statement (DEIS).

In its June 20, 2018 correspondence, NYSDOT indicated that the Draft Scope did not "contain anything regarding proposed traffic impacts and mitigation".

On July 12, 2018, Glenn Watson (of Badey and Watson) provided NYSDOT with a copy of Kimley-Horn's traffic analysis and a requested sight distance matrix. Mr. Watson noted that "Traffic" was not included in the draft scoping document because that issue "was answered to the satisfaction of the Planning Board during the Conservation Analysis and the EAF processes"<sup>2</sup>. Mr. Watson's letter (attached) also provided a detailed explanation as to why access from Horton Road or East Mountain Road North would not be feasible for this project.

In its August 2, 2018 report on the July 12, 2018 submission, NYSDOT had some additional questions that related to the suitability of the proposed US 9 access (would there be phasing, were the traffic projections up to date, account for trucks and speed when calculating sight distances, provide a left-turn lane analysis). In the email that accompanied NYSDOT's report, the Department's Mr. Zimmer noted that these, and how the development would affect drainage on the state highway were the remaining potential concerns.

<sup>1</sup> The drainage study will be submitted to the NYSDOT upon finalization of the site layout.

<sup>2</sup> In an 8/21/2018 email, Chris Robbins (the Town's Planning Consultant) noted that "The Final Scope will not be amended to capture these most recent DOT comments as they were made on and are specific to the State's review of the project's TIS (*Traffic Impact Study*) and not the Scope."

Kimley-Horn provided answers directly to Mr. Zimmer's traffic -related questions in a letter dated October 11, 2018 (with a cc to Ed Goff and Mike Sassi, also at NYSDOT), which indicated that the entrance road, as proposed at that time, would satisfy the Department's criteria for design and that all of the information in the traffic analysis was up to date.

We believe that, once the site layout is complete and the drainage study provided to NYSDOT, we will have provided all of the requested materials and information for NYSDOT to conclude that the proposed entrance road design will meet all of the Department's criteria to safely accommodate all vehicles expected to use it.

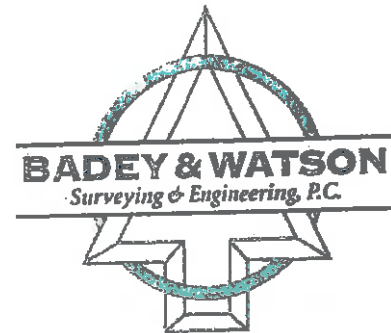
Very truly yours,

KIMLEY-HORN of New York.



John Canning, P.E.  
Project Manager

cc. Mary McCullough  
Lee Zimmer



June 27, 2018

Mary McCullough  
SEQRA /HWP Unit  
New York State Department of Transportation  
4 Burnett Boulevard  
Poughkeepsie, NY 12503

Re: NYSDOT SEQRA #14-300  
Hudson Highlands Reserve  
Route 9, Town of Philipstown  
Putnam County

Dear Ms. McCullough:

This letter is sent in response to your letter to Philipstown Planning Board Chairman Anthony Merante dated June 20, 2018, which was forwarded to us as the project's surveyors and engineers.

The reason that "Traffic" was not included in the draft scoping document is that the question was answered to the satisfaction of the Planning Board during the Conservation Analysis and EAF processes.

For your edification, I am attaching a copy of the "Traffic Impact Analysis" prepared by John Canning, P.E. of Kimley-Horn of New York, P.C., along with sight line profiles prepared by our office. AKRF reviewed the report on behalf of the Planning Board and recommended that traffic impacts have been adequately addressed.

To the best of my knowledge, there has been no written communication with NYSDOT concerning this project. However, we did meet with Albert R. DeNigro, Permit Engineer, on two occasions early in the planning process. During our initial meeting, Mr. DeNigro advised us that the proposed entry was too close to the guiderail protecting the bridge over Clove Creek. Subsequently, our client purchased adjoining commercial property to the north, which allowed us to relocate the intersection approximately 50 feet further north and further away from the guiderail.

The proposed project does not anticipate regular access to either Horton Road or East Mountain Road North, although it does provide for emergency access routes over existing driveways to both roads. Public opposition aside, and there is more than a little, neither road is suited for the traffic that the project will generate. As the scoping document indicates, in addition to the 25 homes that are being proposed, the plan includes a 40-horse equestrian center, which will require occasional horse trailers, feed deliveries, manure removal and other


service vehicles as well as the additional automobile traffic that it will generate. All of this, of course, was considered during the preparation of Mr. Canning's report.

Horton Road is a dead-end street that is about 3,000 feet long. Most of it is a narrow dirt road. There is a particularly sharp horizontal angle in the road that is at the precipice of a sudden grade change from relatively level to -11%, then quickly to -19%, and then almost immediately crosses a bridge that we believe is inadequate. Mill Road connects to Horton Road avoiding the bridge, but it is also very steep and has a difficult horizontal geometry.

East Mountain Road North is a narrow road that runs along a protected creek. While the road is relatively straight and gentle there is insufficient room to make it suitable for the equestrian related traffic and the disturbance that would be required to construct the intersection and roadway into the project would require significant disturbance and blasting, which we do not anticipate will be required at the Route 9 entry point.

We trust that the information in this letter and its attachments is adequate for your review. If it is not, or if you have any questions, please do not hesitate to contact me. Thank you for your attention and concern.

Yours truly,  
**BADEY & WATSON,**  
*Surveying & Engineering, P.C.*



by  
Glennon J. Watson, L.S.  
845.265.9217 x14  
[gwatson@badey-watson.com](mailto:gwatson@badey-watson.com)

GJW/bms

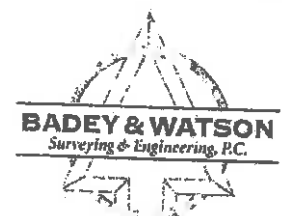
Cc: File U:\86-2288\WO\_21792\_Hudson Highlands Reserve\SEQRA\Responses\MM27\N18BP\_Response\_to\_DOT.docx  
Ulises Liceaga, HHR  
Stephen M. Gross  
Richard L. O'Rourke, Esquire  
John Canning, P.E.

June 27, 2018

Mary McCullough

Page 2 of 2

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**BADEY & WATSON**  
**Surveying & Engineering, P.C.**  
 3063 Route 9. Cold Spring. New York 10516

**LETTER of TRANSMITTAL**

Date: 13 Jul 2018  
 File No. 86-228  
 W. O. # 21792  
 RE:

**TO:**

Mary McCullough  
 SEQRA/HWP Unit  
 New York State Department of Transportation  
 4 Burnett Boulevard  
 Poughkeepsie, NY 12503

Utilises License  
 Hudson Highlands Reserve, Rte 9 & Horton  
 Lot No. on Subdivision  
 Tax Map  
 Permit/Title/PO #

Sent via:  US MAIL  MESSENGER  FEDEX  UPS-2 DAY  UPS-NIGHT  
 PICK-UP  FAX  UPS-COD  UPS-3 DAY  UPS-GRND

**We are sending :**

copies	date	description of document
1	12-Jul-18	Letter Reg.: NYSDOT SEQRA #14-300 (MM27JN18BP_Response_to_DOT.docx)
1		Traffic Impact Analysis
1	20-Jul-17	Sheet 1 of 1 Sight Lines & Profiles for Hudson Highlands Reserve (SB21792_R10_V17)
1		Thumb Drive

**REMARKS:**

Copies to: File

Yours truly:



③ Comment regarding  
 Environ. Impact  
 Report  
 Develop is  
 inevitable  
 1st. Conversation  
 2nd. Subdivision  
 → DEC's president  
 (B) (CSE) County

SPRING NAL UPDATE

### NYS pending environmental legislation

④ A.3658/ S.5576 wetlands protection  
 A.4666/ S.5612 protects streams

These two pieces of legislation would strengthen protection of local wetlands and streams. Current DEC protections only cover areas that encompass 12.4 acres or more if they are on a DEC approved map. NYS is the only state in the North east that does not have protection for smaller wetlands and the more than 1 millions species that are at risk. This legislation would protect smaller wetlands, rivers, streams, creeks, lakes, and wildlife.



### The Birds and Bees Protection Act S5816A/ A.7639

This NYS legislation is aimed at a 6 year moratorium on Neonicotinoids so that the DEC can study them more carefully to determine how best to protect our pollinators and agricultural economy. Pollinators that can be affected by these pesticides include; bees, butterflies, bats, beetles, moths, flies and other native pollinators that are crucial to agriculture in NYS.

⑤ Don't know  
 see if  
 legis.

**Putnam County to Vote on  
 Climate Smart Pledge on  
 June 4, 2019 @ 7:00 PM  
 Carmel, NY**

*The proposal to take the Climate Smart Pledge was voted out of committee on May 17, 2019. It will now go before our County Legislator for approval. If you would like to comment, please send a quick note to [putcoleg@putnamcountyny.com](mailto:putcoleg@putnamcountyny.com)*

### Town meeting - June 6, 2019

- ▶ Vote to support the 2019 Hudson River Estuary Program grant "Green Corridors".
- ▶ Climate Smart Community Update

*"Never believe that a few caring people can't change the world. For indeed, that's all who ever have." Margaret Mead*

Response 3A.28

Karen Ertl  
 Rec'd @ 6/20/19 PH

Rec'd @ 6/29/19 YH

18

J. Perry Pitt

Comments submitted for Planning Board Hearing on Thursday, June 20 at 7:30 pm, by Putnam Highlands Audubon Society, PO Box 292, Cold Spring, NY 10516

I represent the Putnam Highlands Audubon Society with over 250 local members in the area. We appreciate the thoughtful concern the Philipstown Planning Board is giving to the proposed Hudson Highland Reserve "conservation subdivision" project. In line with the Town's adopted Conservation goals in 2017 it is our position that the DEIS wildlife assessment for this project does not include essential and sufficient monitoring procedures. The field sightings done did not cover the breeding and nesting times of most species and did not cover a long enough period of time to establish the biological diversity these lands support and what species breed and nest on the site.

Response  
3B.42 In the DEIS, "Wildlife Sightings" and "Existing Conditions" are included with four field date visits on May 6 & 26, July 9 and August 1, 2015. Four field visits is simply too short a time span to conduct meaningful monitoring of birds. The absence of breeding bird surveys and counts for birds to determine they are not nesting have been omitted, or not done. Bird species breed at different times during the year. Owls breed in winter, Hawks and Eagles breed in Spring through the Summer months and it takes vigorous monitoring and surveying to find their nest sites. Migrating warbler species and forest birds that breed here during the late Spring and Summer would also have been largely missed by the short visit dates.

Response  
3B.43 Forest bird species have been a special concern to Audubon as their numbers have  
3B.18 been dropping. Loss of habitat, fragmentation of forest habitat, as well as climate change are causing these species to decline. Any additional stressors can spell real trouble for these species.

Response  
3B.44, The Warblers migrate thousands of miles back north to their breeding grounds in  
3B.43 the Hudson Valley from South and Central America, Mexico and southern U.S. They do this because the long daylight hours provide them with the time needed to feed and raise their young nestlings. The Hudson Valley and the Hudson River act as migration corridors for birds that stop here to breed, and those that stop to feed up, before continuing up to the northern boreal forests. The plant community in our town supports the insects that these birds need to sustain them on their migrations.

Response  
3B.18 Several bird species listed on the NY State "Special Concern List" are known breeders and nesters in adjacent lands. These include:

Sharp-shinned Hawk, Cooper's Hawk, Red-shouldered Hawk, Whip-poor-will, Cerulean Warbler and possibly Golden-winged Warbler.

Bald Eagles are on the NY State "Endangered Species List" with nearby nests.

Response  
2.19, Reptile and amphibian studies were also not done thoroughly for this study.  
3B.16, Serpents move in June from their over-wintering shelters in hollow logs or caves  
3B.29 where they spend the winter. Turtles also start moving to areas where the females will lay eggs in very late May or June. Again, the "wildlife sightings" were not done during the seasonal time where they could be monitored.

- Response 3B.22, 3B.29** "Species of Special Concern" on the NY State List that are likely to be found on these lands since they are on adjacent properties are: Spotted Turtles and Wood Turtles. I personally rescued a Wood Turtle that was crossing the road in the direction of this property from East Mountain Road South two weeks ago. In addition, Salamanders, such as the Jefferson Salamander, another species on the NY State "Species of Special Concern List" are likely to be found there as well. Amphibians are shy secretive animals that live on the forest floor and near streams and it takes many hours of turning over logs and rocks to establish their presence.
- Response 3B.28** There is no mention of audio monitoring for the presence of bat species so this component of wildlife sightings is missing as well.
- Response 3B.45** There is also no mention of monitoring for New England Cottontails which are known to breed on the ridge. They are also on the NY State "Species of Special Concern" list.
- Response 3B.46** The project has been designed with houses forming a half circle around the pond which means that wildlife use will be limited or become non-existent. Building houses near the pond means that lawns, ornamental shrubs and decorative plantings will replace the native plant species that form a pond community that supports pond species. Chemicals used to support the lawns and ornamentals will find its way into the pond and disrupt the natural processes of ponds and the wildlife they support. Has the Town studied the wetland delineation infield?
- Response 3B.47** Constructing an equestrian center with 40 horses on the property will likely mean eutrophication of the pond and a lowering of the dissolved oxygen available for fish. Clove Creek and its tributaries will also suffer from the degradation of water quality.
- Response 3A.17** We have learned over the past decades that fragmentation of forests result in increased invasive plants and decreased native plants. Many non-profits in this Town have supported the "green corridor" concept that allows wildlife species to migrate and survive unhindered by buildings, roads and other developments. Putnam Highlands Audubon, Constitution Marsh Audubon, Hudson Highlands Land Trust, Scenic Hudson and New York State Parks have all worked together for many decades to preserve lands in our community that form a "green corridor" and promote survival of our native flora and fauna.
- Response 3B.69** When "conservation building designs" were first introduced they seemed to be a solution to rampant sprawl. The reality, is that the lands the projects set aside as "conservation areas" are usually areas that are unbuildable anyway. They are devoid of the very resources that native plants and wildlife need to survive. The habitats used for the building areas are the ones that animal species need.
- Response 2.18** We ask the Town Planning Board to consider that this "conservation project" is the first of many. It must be an environmental model with real seasonal monitoring and assessments, with environmental standards and limits that any future projects must also adhere to before consideration in this Town.

Submitted by,

**Connie Mayer-Bakall**

**President of Putnam Highlands Audubon Society**

**PO Box 292, Cold Spring, NY 10516**

Rec'd @ 6/20/19 PH from  
Carli Fraccarolli



SAVING THE LAND THAT MATTERS MOST

Scenic Hudson, Inc.  
One Civic Center Plaza  
Suite 200  
Poughkeepsie, NY 12601-3157  
Tel: 845 473 4440  
Fax: 845 473 2648  
info@scenic Hudson.org  
www.scenic Hudson.org

Statement of

Jeffrey Anzevino, AICP  
Director of Land Use Advocacy  
Scenic Hudson, Inc.

Town of Philipstown Planning Board  
Public Hearing

Hudson Highlands Reserve

June 20, 2019

---

My name is Carli Fraccarolli, Advocacy Associate for Scenic Hudson. Scenic Hudson helps citizens and communities preserve land and farms and create parks where people experience the outdoors and enjoy the Hudson River. I am delivering this testimony on behalf of Jeffrey Anzevino, Scenic Hudson's Director of Land Use Advocacy. Scenic Hudson will submit a more comprehensive comment letter before July 8<sup>th</sup>.

Response 4.11 As the first project seeking Planning Board approval as a "conservation subdivision" under the town's 2011 zoning code, the Planning Board's review of this proposal will be precedent-setting. As proposed, the applicant's preferred alternative, Alternative E, is inconsistent with provisions in Philipstown's conservation subdivision zoning code. Further, it would result in significant environmental impacts with respect to biodiversity and habitat connectivity, water quality and aquifer protection, and adverse visual impact from the Wilkinson Trail on Scofield Ridge. It is crucial that these impacts and inconsistencies are taken into consideration when making a decision.

Response 2.33 Scenic Hudson believes that the project should be redesigned to be more consistent with the home siting of Alternative D. This relocates five residencies from the western side of Ulmar Pond and clusters them on smaller lots. In addition, we believe that the equestrian facility should be reduced in size and laid out in a more compact arrangement leaving a wider habitat corridor to the south.

**Proposal is not a Consistent Conservation Subdivision**

Response 2.17 As proposed, Hudson Highlands Reserve does not adequately meet town code requirements for, nor the generally accepted definition of, a conservation subdivision. As we stated in our February 15<sup>th</sup>, 2018 letter, rather than cluster homes in a compact arrangements, the applicant proposes homes spread out along multiple cul-de-sacs. The large house lots sprawl across the entire western half of the property, dividing remaining natural areas into three separate sections. This would result in forest fragmentation and would not protect the important habitat values found on the site. This is inconsistent with Philipstown's zoning, which requires that:

*"The configuration of the open space land and dwellings shall not result in fragmentation of the open space land in a manner that interferes with its proper management and protection of its conservation values."*

(Section 175-21 A(3)(b))



**Response 4.12** Scenic Hudson disagrees with the applicant's assertion (page 141) that removing the five homes from the pond's west side and reducing impervious area (by 2.5 acres) and disturbed area (by 2.9 acres) is inconsequential. Any removal and reduction of impervious and disturbed area is consequential, and consequently decreases the perimeter of the development. This results in a smaller amount of lower-quality edge habitat that would drive away species that rely on large areas of contiguous forest.

#### **Biodiversity**

**Response 3B.70** The area surrounding the proposed Hudson Highlands Reserve project site is widely known for its value to biodiversity and the natural beauty of the Hudson Valley. The site is within the NYSDEC Hudson River Estuary Program's *Hudson Highlands Significant Biodiversity Area*. Likewise, The Nature Conservancy recognizes the value of the large, continuous forests in this area with their *Hudson Highlands Forest Block* designation.

Any losses of habitat on this site are a loss to some of the largest and most intact areas of forest habitat in the Hudson Valley. Further, developments must conserve habitat corridors to allow wildlife (including threatened and endangered wildlife known to occur in the area) to move between habitat types on and off the project site, including travel between wooded uplands, Ulmar Pond, and Clove Creek. The applicant's preferred alternative, particularly when proposed under the guise of a conservation subdivision, does not conserve these corridors and, moreover, fragments the site.

For the reasons above, a more concerted effort should be made to cluster the development. Minimizing its footprint and including strong mitigation measures are critical to minimizing the development's negative impacts on this notable forest and biodiversity.

#### **Water Quality**

**Response 3A.19** Scenic Hudson is concerned that a 40-horse commercial facility and sprawling residential development will have negative water quality impacts on Clove Creek and its aquifer. Further study is needed to assess the risk these pieces of infrastructure pose to important regional water resources.

#### **Visual Impact**

**Response 3D.10** The draft environmental impact statement (DEIS) does not take into account visual impact from Scofield Ridge, asserting that views from these trails are unimportant and described as "distant views...and...seasonally available to all but the hardiest of hikers who might visit the ridge in the winter." This is not the case. The Wilkinson trail is mapped and maintained by the NY-NJ Trail Conference and Scofield Ridge is increasingly popular amongst hikers, even during leaf off conditions late fall through the spring.

**Response 3D.6** Further, the DEIS cites a previous visual analysis (page 135) included in Appendix T, that determines the site might be visible from three vantage points along Scofield Ridge. Appendix T references Exhibits M-4 through M-12, however these are not included in the Appendix. Scenic Hudson recommends that visual simulations should be provided from these three locations on Scofield Ridge.

#### **Conclusion**

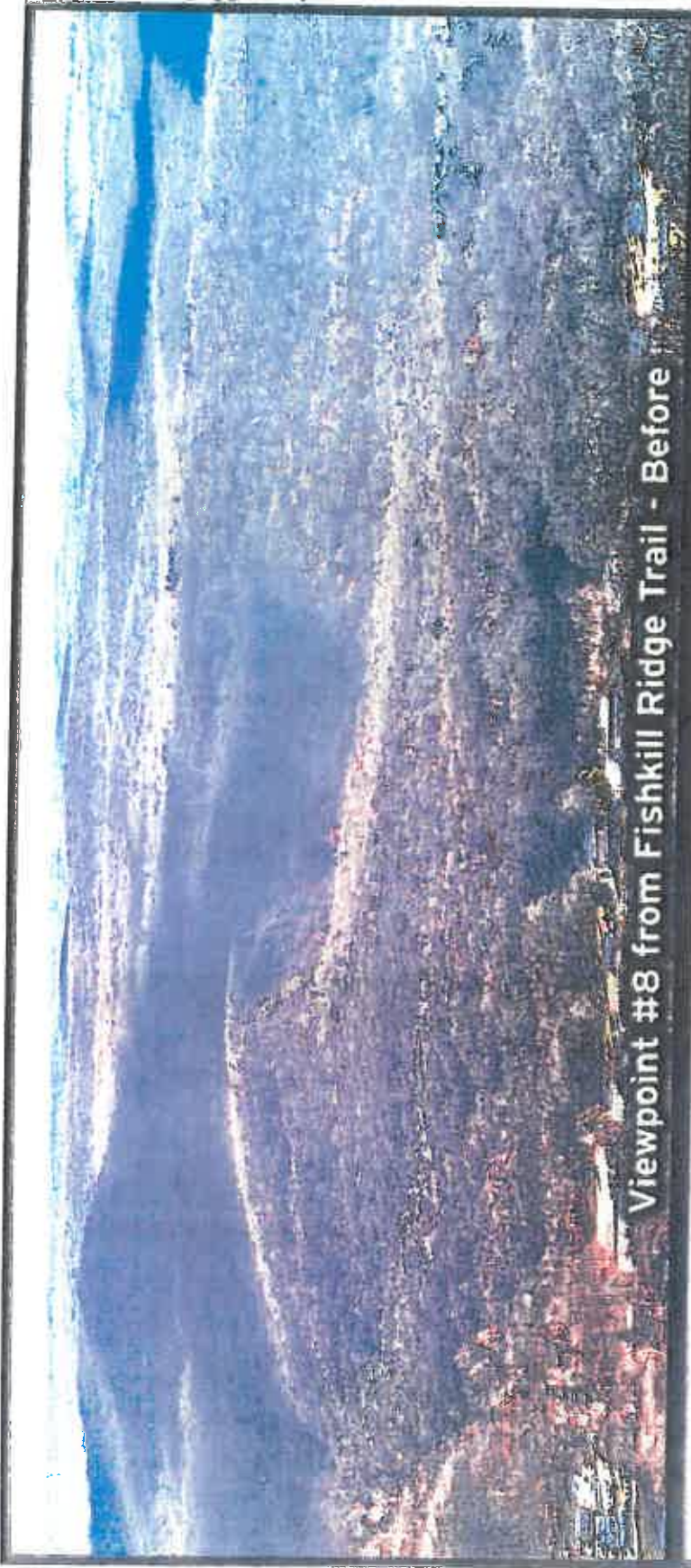
Your review of this project will set the precedent—good or bad—for reviews of proposed conservation subdivisions in the future. Therefore, and given its location in the *Hudson Highlands Significant Biodiversity Area* and *Hudson Highlands Forest Block*, it is critically important that you review this conservation subdivision application in strict accordance with the Town Code.

Scenic Hudson appreciates this opportunity to provide these comments tonight.

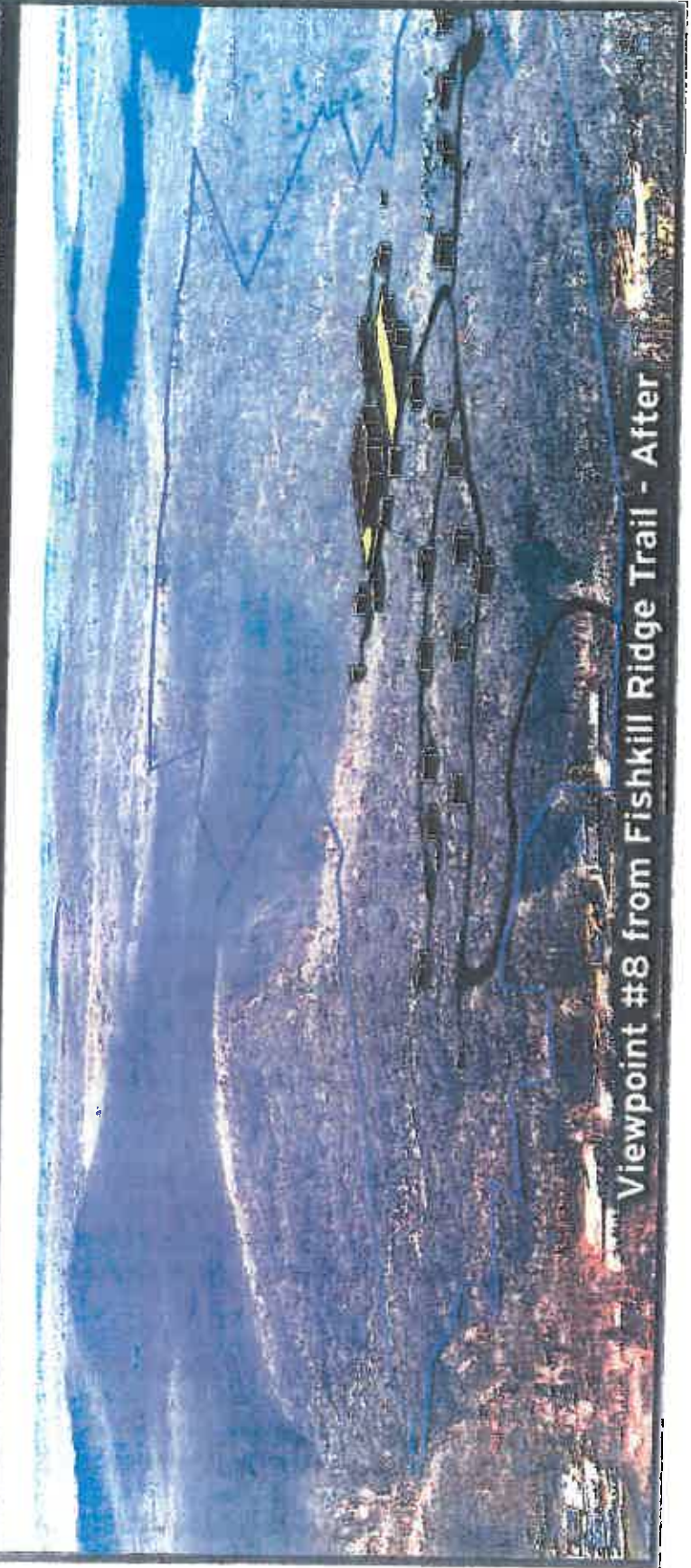


Hank Osborn

Rec'd @ 6/20/19 PH



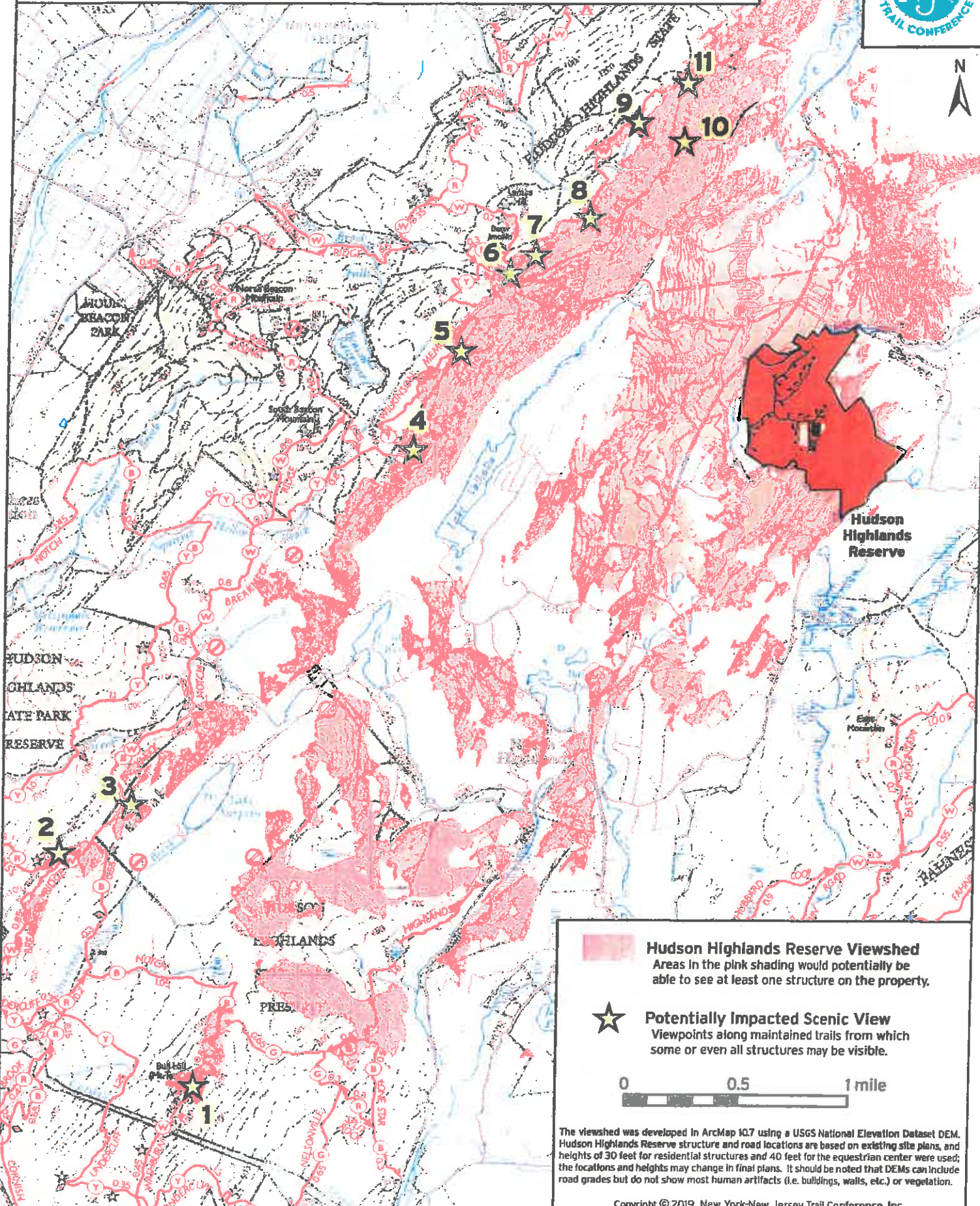
Viewpoint #8 from Fishkill Ridge Trail - Before





Viewpoint #8 from Fishkill Ridge Trail - After



# Hudson Highlands Reserve near Hudson Highlands State Park Preserve: Viewshed Analysis and Trail System Impact



 **Hudson Highlands Reserve Viewshed**  
Areas in the pink shading would potentially be able to see at least one structure on the property.

 **Potentially Impacted Scenic View**  
Viewpoints along maintained trails from which some or even all structures may be visible.

0      0.5      1 mile

The viewshed was developed in ArcMap 10.7 using a USGS National Elevation Dataset DEM. Hudson Highlands Reserve structure and road locations are based on existing site plans, and heights of 30 feet for residential structures and 40 feet for the equestrian center were used; the locations and heights may change in final plans. It should be noted that DEMs can include road grades but do not show most human artifacts (i.e. buildings, walls, etc.) or vegetation.



Rec'd @ 6/20/19 PH 15

Marianne McKinley

Public Hearing  
DOT  
DEIS

Public Hearing Hudson Highlands Reserve

I have been

I am a resident of Philipstown, living on East Mountain Road North for 16 years. Although I have several concerns about the proposed Hudson Highlands Reserve project, I would like to specifically focus on the traffic safety issues associated with access to the site. First and foremost, I would like clarification on exactly where the main access point to the site will be and if it has gotten approval from the DOT. Second, I would like to know if a traffic study has been submitted to the DOT.

is it approved, EMRN, Horton Rd?

Response 2.90

I know I speak for many of my neighbors, for whom safety is a priority, when I ask about a traffic study. But I don't just speak for my current neighbors, I also speak for the safety of any potential future neighbors who might live in proposed Hudson Highlands Reserve. I also speak as a victim of a serious car accident at the intersection of Route 9 and EMRN, which is currently shown as proposed access point to site.

Last summer, I was waiting on the southbound side of Route 9 to make a left turn to go home onto East Mountain Road North. My car was rear-ended and totaled by an 18 wheeler tractor trailer going over 50 MPH and I was spun into the oncoming traffic. At that instant, I thought I would never see my son again. I suffered trauma and serious injuries, and the police said I am lucky to be alive. The police also mentioned that accidents happen at this spot all the time. So you can imagine why this is an important issue for me.

But the point is not my accident, it's everyone's safety who travels up and down route 9. It seems that Route 9, in its entirety, has gotten worse, with many more accidents causing fatalities and even wide spread power outages. I would hope that our Planning Board demands submittal of a thorough traffic study from the applicant for review by the DOT. Regardless of where the main access point ends up, I would hope that the applicant would provide mitigation, given the additional traffic that the proposed project would generate. Solutions such as a turning lane, flashing lights or reduction of speed limit along that section of Route 9 need to be looked at.

so which is it?

Response 2.85

I would like the Board to address two letters it received from the DOT: In the first letter dated June 20, 2018, the DOT deemed the direct access off of route 9 to the development as "not necessary" because there are access points on East Mountain Road North and Horton Road. As far as EMRN goes, it's already hard to get into and out of Route 9 from this narrow road. Further traffic and horse trailers would worsen the bottleneck and increase hazards on a road which is also part of Haldane School Bus Route.



*clear*  
In the second letter dated June 7, 2019 it is ~~apparent~~ that a full traffic study has not been submitted to the DOT. They raise ~~again~~ concerns they raised one year ago that were not addressed in the ~~Draft Environmental Impact~~ *DEIS* Statement. The DOT notes that there is no mention of traffic in the DEIS and the Traffic Impact Analysis and DOT comments are not included in the appendix. They are now asking the Board to address all of their comments. ~~The most important statement from the letter is that,~~ "as an involved agency", the DOT is "unable to endorse the DEIS." How can this project be approved by the Board without endorsement from the DOT?

In this letter, the DOT also wonders if the applicant addressed any of their Traffic Study Comments of 8/1/18 , which includes item 7. "perform the left turn analysis for the Route 9 Southbound left turn into the site". This is exactly where my accident occurred. Has this analysis ever been done? If direct route 9 access is not granted, if someone were to travel south on Route 9 to get to their new home or horse stable at the Hudson Highlands Preserve, they would need to make that left turn onto East Mountain Road North, where there is currently no turning lane, in a 50 MPH zone. ~~This is a turn the residents of EMRN make on a daily basis and most of us are, frankly, terrified of it.~~

~~In summary,~~ please clarify if any traffic studies have been done, what they show and when the DOT's comments will be addressed. Please also clarify which access points to the site have been approved.

Thank you.

Response  
2.90

Title

Comprehensive Plan (CP) is Relevant to this application

CP is a statement of a community's goals and a conceptual roadmap for how to achieve them.

It isn't the law, but it does provide the "backbone" for the law in concise, unambiguous language.

When the law itself, in this case our open space development zoning law, becomes subject to a variety of interpretations as it has in this application, I believe that there is an opportunity to go back to the CP, particularly when that law is being interpreted for the first time in the history of the town.

So amongst other things here is what the CP says about open space development

Response 3C.5

Read headline on Chapter 3 Section R 2.4 of Comprehensive Plan

Repeat "with safeguards to ensure that such developments do not lead to more development than would otherwise occur"

Response 2.29

Because the property we are discussing is located in the Town's OSO zone, the applicant would be allowed to build 10 houses under the law pertaining to a conventional subdivision. Yet the open space plan the

Response 2.24

PB is considering calls for 25 houses and a commercial equestrian center capable of housing 40 horses. *I was out of time at this point*

Because the applicant's plan calls for more development than would otherwise occur (under conventional subdivision zoning) it is in my opinion that it is not in keeping with either the terms or the spirit of the Town's existing CP.

Respectfully submitted,

Nat Prentice, Coordinator of the Town of Philipstown's Comp Plan Update Committee June 20, 2019 Tel. 845-661-8937

rec'd @ 6/20/19 A  
13

Comments made by David C. Gordon of Garrison, NY  
Philipstown Planning Board Public Hearing  
June 20, 2019 at 34 Kemble Avenue, Cold Spring, NY.

**Topic: Hudson Highlands Reserve and its Draft Environmental Impact Statement.**

Good evening and thank you to the Board for taking my comment. Thank you also for holding this important review of the Hudson Highlands Reserve proposal.

On the surface the development of only <sup>39</sup>~~twenty-five~~ acres of a 210 acre site sounds ideal.

171. BUT the devil is in the details, usually. There is good reason that the ~~185~~ acres left undeveloped are not being developed. These acres tend to be on terrain too steep or too wet to be considered.

Response  
2.18

The proposed development of ~~24 (or is it 25)~~ L E E D platinum level certified homes and a forty-horse barn dressage complex will effectively split the 210 acres in such a way as to preclude the natural and safe passage of any wildlife along this corridor.

Response  
3B.34,  
3B.54

And poor old Clove Creek takes yet another hit of a magnitude that it can ill afford.

Response  
3A.11

Perhaps, someone could explain the section in the Draft Environmental Impact Statement on page 14, Section B. 2. c entitled "Forest Fragmentation Impacts"

Response  
3B.67

Its concluding sentence states, quote, "There will be no TRUE fragmentation, though there will be SOME habitat perforation." The use of the adjectives 'true' and 'some' seem to be quite telling.

Sounds a bit like being a little pregnant.

In conclusion, we, here in Philipstown, have more than 25 of these designated Conservation Subdivisions.

Let us not lower the bar and set a poor example in this, the first test of this enlightened zoning mechanism.

Thank you for your attention.



My name is Dr. William Schuster. I am a Cornwall resident, a professional ecologist, and have been Executive Director for the past 27 years of the non-profit Black Rock Forest in the Hudson Highlands. In that capacity I have extensively studied Highlands ecology, have published a book chapter on the subject, and have used scientific knowledge and principles to manage the 4000-acre BRF for decades.

I am commenting on the DEIS prepared for the Hudson Highlands Reserve, proposed to become Phillipstown's first "Conservation Subdivision." This is a laudable concept and one that should help our communities live sustainably into the future, while conserving our natural resources, if implemented appropriately. To qualify as a CS, the zoning code states that such projects must preserve contiguous open space and must protect the areas with the most conservation value- in other words those habitats critical for maintaining populations of our native species that are of special conservation concern.

My two concerns are, first that the project as proposed fails the contiguous conservation criterion by establishing a barrier dividing the conserved parts of the project area, and second that the environmental studies to date fail to adequately address the local amphibian and reptile species of highest conservation concern, and the habitats required by these species.

These two problems should and can be addressed- first by accomplishing surveys of breeding habitats and species in the seasons necessary- particularly vernal pools during the April-May breeding season. There is no other way to know what species of conservation concern are on site. As Dr. Michael Klemens pointed out in a letter sent earlier to the planning board- wood frogs were found on site and these are OBLIGATE vernal pool breeding species. That means there must be vernal pools on site but no appropriate search to locate and map these habitats has yet been accomplished within the March-April time period when they must be evaluated. The Phillipstown community should KNOW whether or not vernal-pond-requiring species of state-level conservation concern like the marbled and spotted salamander, and other wetland-requiring threatened species like the wood turtle, are on site. The DEIS as it stands does not present appropriate surveys to draw conclusions on this.

Second, the development of the property should be shifted by some additional clustering of some house locations- especially moving them away from the edge of Ulmar Pond- thereby providing for east-west ecological connectivity. The proposed houses and roads are now laid out in a contiguous north-south line that effectively divides the site by a wildlife-inhospitable barrier. The need to maintain east-west connectivity is amplified by the fact that there are large parks not far to the east- Fahnestock SP- and west- Hudson Highlands SP. And Ulmar Pond is nearly encircled by these developed lots and and thus is cut off from the surrounding uplands needed for a healthy pond environment.

As ecological science and conservation have developed in recent years, it has become clear that if we want a future that will still include most of our native wildlife species we must pay more attention to connectivity than we have in the past. This will require conserving connectivity where it exists, mitigating barriers where they exist, and certainly not creating new barriers to wildlife movement.

I feel it is the responsibility of the planning board to see that these actions are required of projects that seek the classification of Conservation subdivisions.

William Schuster, 131 Continental Road, Cornwall NY 12518. Dated June 20, 2019

*William Schuster*

**Subject:** Fwd: Objection to East Mountain Conservation Easement being considered at tonight's board meeting.

**From:** Linda Valentino <lvalentino@philipstown.com>

**Date:** 6/20/2019, 1:43 PM

**To:** Tara <tpercacciolo@philipstown.com>

----- Forwarded Message -----

**Subject:** Objection to East Mountain Conservation Easement being considered at tonight's board meeting.

**Date:** Thu, 20 Jun 2019 13:08:12 -0400

**From:** Tara Vamos <tara@itsallaboutmovement.com>

**To:** [amerante@philipstown.com](mailto:amerante@philipstown.com), [lvalentino@philipstown.com](mailto:lvalentino@philipstown.com)

Dear Board Members,

Thank you all for your time and careful consideration regarding this conservation easement being considered at a public meeting tonight, 6/20 at the Old VFW.

I'm not able to attend the meeting tonight. I live in Philipstown, and I am very concerned that this development will have a negative environmental impact. I am also concerned that granting this conservation easement will open the door for other easements that do not adequately protect our waterways and wildlife.

**Response** Any horse facility will involve horse manure, discarded horse bedding, and considerable truck and trailer traffic. Additional wear and tear on the road way will mean increased erosion as well as erosion and soli compaction if trailers are being parked or unloaded on unpaved areas. All of this will lead to both silt and fecal matter in the local waterways.

3A.9

I don't see how this development meets the conservation requirements.

Thank you for your time and consideration,

Tara Vamos

6 Rock St.

Cold Spring, NY 10516

**Subject:** Fwd: Philipstown Planning Board Public Hearing Comments  
- Hudson Highlands Reserve Conservation Subdivision  
**From:** Linda Valentino <lvalentino@philipstown.com>  
**Date:** 6/20/2019, 1:01 PM  
**To:** Tara <tpercacciolo@philipstown.com>

----- Forwarded Message -----

**Subject:** Philipstown Planning Board Public Hearing Comments -  
Hudson Highlands Reserve Conservation Subdivision

**Date:** Thu, 20 Jun 2019 11:53:38 -0400

**From:** Ginny <ginnyflies@usa.net>

**To:** [amerante@philipstown.com](mailto:amerante@philipstown.com)

**CC:** [plewis@philipstown.com](mailto:plewis@philipstown.com), [kconner@philipstown.com](mailto:kconner@philipstown.com),  
[nzuckerman@philipstown.com](mailto:nzuckerman@philipstown.com), [gagnon@philipstown.com](mailto:gagnon@philipstown.com),  
[dhardy@philipstown.com](mailto:dhardy@philipstown.com), [ntomann@philipstown.com](mailto:ntomann@philipstown.com),  
[lvalentino@philipstown.com](mailto:lvalentino@philipstown.com)

Dear Chairman Merante and Members of the Philipstown Planning Board,

Due to personal circumstances, I am unable to attend this evenings Public Hearing on the subject Subdivision.

I am a resident of Dutchess County with Ancestors interred in the North Highlands Cemetery on the Corner of Horton Road and Route 9 in Philipstown – Including, but not limited to, my Great Grandparents John B. and Freeloove (Ireland) Hawks.

My concerns are as follows:



I am having difficulty placing the subject subdivision in relation to the North Highlands Cemetery on the Corner of Horton Road and Route 9. It is difficult to ascertain this information from the on-line plans.

**Response**  
**2.100** I notice blasting noted as small to moderate impact - EAF Page 10 of 13 of Part 2 - 15b Noise Odor Light. However I do not see it noted as being required to be addressed in the Scoping Document or in the DEIS?? Why didn't the Town require this to be addressed in the Scope? And why is it not addressed in the DEIS?

There are significant early monuments still standing in the North Highlands Cemetery including that of my great grandparents. It would be very disheartening if it along with others were to be toppled by blasting when such may have been avoided if proper attention had been paid to the blasting impact.

This is my concern. Please see that my comments are entered into the public record for the subject Public Hearing.

Thank you for this opportunity to address my concerns.

Virginia A. Buechele  
Great Granddaughter of John B. Hawks and Freeloove Ireland.  
Dutchess County  
(845)518-4458

788 Old Albany Post Road  
 Garrison, NY 10524  
 June 13, 2019

Anthony Merante, Chairman  
 Town of Philipstown Planning Board  
 238 Main Street  
 Cold Spring, NY 10516

Dear Mr. Merante and Members of the Board,

In considering the application of the Hudson Highlands Reserve, I am appalled that the project is proposed at all. It will ruin an ecologically important and beautiful site.

Response  
 3A.11

However, there are four of the more egregious proposals. One is to manage the huge amount of manure (forty horses!) and sewage (25 family houses) on site. Since the property is part of the Clove Creek Watershed the **removal of manure and sewage is very important.**

Response  
 2.6

A second specific concern is the "Weekender" issue. There will be 25 new families in Philipstown who do not plan to be part of our community. Each with their own swimming pool and more than one horse, they can live in seclusion.

Response  
 2.75

It may not be a concern to most of us, but to maintain 40 horses that will never be out at pasture (not required by the stable's commercial designation) is unacceptable. The Weekenders presumably will ride only two or three days of the week; how and by whom are they exercised on the other days?

Response  
 2.85

Fourth, DOT has not approved a new access to Rt. 9. Is either Horton Rd. or East Mountain Rd. North suitable for construction vehicles and horse trailers?

I ask you, please, to deny this application. Thank you for your diligence and patience.

  
 Betsy Calhoun

**Subject:** Fwd: For Planning Board Meeting June 20, Re:HHR Project  
**From:** Town Clerk <townclerk@philipstown.com>  
**Date:** 6/20/2019, 8:21 AM  
**To:** Tara Percacciolo <tpercacciolo@philipstown.com>

----- Forwarded message -----

**From:** Ellen Dinerman <edin279@sbcglobal.net>  
**Date:** Wed, Jun 19, 2019 at 9:49 PM  
**Subject:** For Planning Board Meeting June 20, Re:HHR Project  
**To:** <townclerk@philipstown.com>  
**Cc:** <lvalentino@philipstown.com>

Dear Philipstown Planning Board,

I am the owner of 425 East Mountain Road South. This house was built by my grandparents in 1920. I think the HHR project's border will be across East Mountain Road South from me. The area is quiet.

I want to share my concerns about the HHR Project. I have read their website and it raises many questions.

This is a new model of development and needs to be done in line with the mandates for conservation, as it will become a precedent for future development.

Is the conserved land open to the public? Will the pond be open to the community? It appears that the only element that will "benefit" or be open to the community is the option of some of the horseback riding lessons.

**Response 2.17** How will the traditional subdivision co-exist with the intent of Conservation Development?

It seems that there was an insufficient environmental survey, and questionable presentation of environmental data.

**Response 2.90** It seems that the developer has not addressed the DOT's 2014 request for information, DOT's 6/2018 refusal to grant access to Route 9, and HHR's perpetuation of the fiction that neither East Mountain Rd N nor Horton Rd would be used for access.

**Response 3.B.70** Are wildlife corridors being increased to accommodate the loss of wild area?

**Response 2.31** It is being marketed as "second homes"; what will be the impact if people live there year-round (i.e. water, septic, etc.)?

Will the developer make a commitment to limit tree cutting to the necessary lot envelope?

**Response 3B.72** What are the developer's plans to mitigate the noise during the construction?

**Fwd: For Planning Board Meeting June 20, Re:HHR Project**

I would appreciate just an acknowledgement that you received this email.

Thank you,  
Ellen Dinerman

P.S. Will the meeting be streamed live?

—  
Tina M. Merando  
Town Clerk  
Town of Philipstown  
238 Main St.  
Cold Spring, NY 10516

TEL: 845-265-3329  
FAX: 845-265-3958

**Subject:** Hudson Highlands Reserve DEIS  
**From:** SCHNEIDERMAN <robfern8@optonline.net>  
**Date:** 6/19/2019, 5:17 PM  
**To:** tpercacciolo@philipstown.com

I have some questions after reading the DEIS:

Response  
3A.11

1. Protocols were described in handling the large quantities of equine waste for the 40 horse stable. Once the facility is operational, does the Town monitor adherence to those protocols to mitigate the potential impacts (odor, insects, ground water and surface runoff)?
2. Will the facility be open to the public for riding lessons or competitions?

Thank you.

-Rob Schneiderman



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Garrison, NY 10524

phone: 845.424.3358  
fax: 845.424.3483

info@hhlt.org  
www.hhlt.org

June 18<sup>th</sup>, 2019

Anthony Merante, Chairman  
Philipstown Planning Board  
238 Main Street  
Cold Spring NY 10516

RE: Hudson Highlands Reserve – Draft Environmental Impact Statement

Dear Chairman Merante and Honorable Board Members –

We appreciate the opportunity to comment on the Draft Environmental Impact Statement (DEIS) for Hudson Highlands Reserve. Please find attached to this letter a **25-page report** with our full comments on the DEIS.

We appreciate the work the applicant has done in producing the DEIS, their desire to conserve land and natural resources, and their plan to construct energy efficient homes. However, we have several major concerns with the DEIS, including:

- Incomplete studies of wildlife and water sources;
- Insufficient mitigation of significant environmental impacts;
- Fragmentation of the landscape and blocking of wildlife corridors;
- Configuration of conserved open space inconsistent with zoning code; and
- Missing visual analysis and simulations.

The attached **25-page report** contains our comments, including eight (8) recommended actions to remedy deficiencies in the studies of significant impacts, and to mitigate identified impacts. These 8 actions are also listed below:

**Response (i)** Conduct a comprehensive study of vernal pools during the appropriate seasonal window (March-April) and complete a full study of amphibians and reptiles. Mitigate impacts on these, and all NY Species of Special Concern.

3B.14  
Response  
3B.23

**Response (ii)** Exclude the 11-acre equestrian facility from the conserved open space, in order to comply with 175-21 A(3)(b) of the zoning code, since the intense development of that land significantly impairs the conservation value. Also, remove the historic road from inclusion in the conserved open space to simplify conservation easement management.

Response  
2.65

**(iii)** Remove the five houses on the West Side of Ulmar Pond and relocate them to be clustered with others to the northwest side of the property. This will preserve the wildlife corridor between Clove Creek and Ulmar Pond, place the conservation easement on contiguous protected land, and help mitigate **Response 4.9** impacts on NY Species of Special Concern.



- Response 3B.27** (iv) Reconfigure the equestrian facility to move the horse trailer parking area, in order to widen the wildlife corridor from the eastern slopes of the property to the pond.
- Response 3D.8** (v) Complete visual simulations of the development from viewpoints in Hudson Highlands and Fahnestock State Parks. Take appropriate mitigation steps once visual impacts are known.
- Response 3A.16** (vi) Require ongoing testing in Ulmar Pond and Clove Creek before, during and after construction, and on an ongoing basis, as a condition of site plan approval. Require that the Town oversee the testing, paid for by the applicant or the Homeowners Association (HOA), and that construction and/or use of the equestrian facility be halted pending remediation, should water quality deteriorate. Require monthly testing of the pond and creek during construction. Mandate quarterly testing after construction. Require a performance bond or letter of credit for water testing costs be posted by the applicant, to be drawn upon in case of default by the HOA. Require similar testing and mitigation steps for the Clove Creek Aquifer, and especially monitoring of the common sewerage treatment system under the horse turnout paddock and the impact it has on the aquifer.
- Response 2.49** (vii) Require that the conservation easement holder be nationally accredited by the Land Trust Accreditation Commission. [www.landtrustaccreditation.org](http://www.landtrustaccreditation.org) Given this is the first Conservation Subdivision in Philipstown, specialized expertise will be needed to monitor and enforce such a complex easement involving possible encroachments by 25 homeowners and users of a large commercial equestrian facility.
- Response 2.68** (viii) Require that the equestrian facility be closed by the town if horses are being used on the property outside of the equestrian facility in violation of the proposed conservation easement, as a requirement of site plan approval.

Quoting from Exhibit B to our full report, we appreciate “the incredible challenges local decision-makers face when confronted with divergent expert testimony, and also recognize that local decision-makers hold the future of the region’s biodiversity in their hands by the manner and thoroughness in addressing these issues.”

Thank you for the opportunity to comment on the DEIS.

Sincerely,



Michelle Smith, Executive Director



**DATE:** June 18<sup>th</sup>, 2019  
**TO:** Philipstown Planning Board  
**FROM:** Michelle Smith, Executive Director, Hudson Highlands Land Trust (HHLT)  
**RE:** Hudson Highlands Reserve – Draft Environmental Impact Statement (DEIS)

This document and the attached Exhibits detail our comments on the DEIS for the proposed development known as Hudson Highlands Reserve. Items (1) – (4) on Pages 1-3 provide a summary of our comments. Item (5) on Page 4 proposes eight (8) remedies to cure both deficiencies in the analysis of significant impacts, and to provide mitigation of identified significant impacts. Pages 5-14 provide details of our comments with references to the relevant pages of the DEIS and its appendices. This is followed by Exhibits A through E, which further support our comments.

### **SUMMARY OF COMMENTS**

**(1) Vegetation and Wildlife (Section IV.B of DEIS):** The analysis of wildlife is incomplete and there is insufficient mitigation of identified impacts. The rationale for these conclusions are summarized below and discussed in detail in the relevant sections following this summary:

a. **Incomplete Studies of Amphibians and Reptiles:** The DEIS concludes *“No areas were observed that would support the seasonal presence of vernal pools”*. However, the study from which this conclusion was drawn was conducted in May 2015, too late in the year for vernal pool identification, particularly in a dry year. (2015 was an especially dry year, with precipitation significantly below average by May.) An indicator species for vernal pools (wood frog) was identified on site and documented as ubiquitous in the area, and yet the search for vernal pools was not conducted in the appropriate seasonal window of March through April. There was insufficient research conducted to determine the full suite of species of amphibians and reptiles on site, including salamanders and turtles. Additionally, the DEIS states that *“two other species of Special Concern, eastern hognose and eastern worm snakes, may also utilize the site”*, but these were not studied further.

Response  
3B.14

b. **Insufficient Mitigation of Significant Impacts:** Significant impacts to NY Species of Special Concern, such as the observed red-shouldered hawk and eastern box turtle are identified but, for the eastern box turtle, the only mitigation action proposed is to move turtles elsewhere if they are discovered on site during construction. Relocation of eastern box turtles is harmful to the species, and is associated with high mortality. In the case of the red-shouldered hawk, the sole mitigation action proposed is to protect the upland 50+ acre forested parcel, despite the DEIS stating that *“Nesting almost always occurs near water, such as a swamp, river or pond.”* Similarly, potential impacts to wood thrush, a Species of Greatest Conservation Need, were inadequately addressed.

Response  
3B.23



- Response  
3B.34
- c. **Necessary Wildlife Corridors are Blocked:** One of the major conclusions in the Steven Coleman letter dated September 2014 in DEIS Appendix C is the necessity to protect the wildlife corridor between Clove Creek and Ulmar Pond. However, this is overlooked in the Site Plan design by placing five (5) houses and a road along the west side of Ulmar Pond, thereby blocking this corridor, and creating a potentially significant impact to amphibians and reptiles without any compensatory mitigation.
- Response  
3B.26
- d. **Limited Discussion of Impact of Equestrian Facility on Wildlife:** The impact of the proposed 40-horse facility on wildlife habitat is not adequately addressed, especially its impact on the corridor between the eastern slopes of the property and Ulmar Pond.
- Response  
3B.60
- e. **Outdated Science on Landscape Fragmentation:** The key conclusions about fragmentation in the DEIS are drawn from the 1998 Lathrop paper. In the 20 years since this paper was published, the science of conservation biology as it pertains to habitat fragmentation and connectivity has evolved tremendously, and this updated science should be used as the basis for decision-making. Up-to-date science more fully accounts for the entire suite of impacts that result from the placement of development into natural areas. In addition, the conclusions drawn from the Lathrop paper focus on only one of five criteria for conservation development – proximity to existing human infrastructure (or “habitat fragmentation potential”). The DEIS does not factor in the other four criteria, including proximity to water resources, where development in close proximity (such as houses wrapped around a pond) has severe adverse impacts, according to the Lathrop Paper.

(2) **Water Resources (Section IV.A of DEIS):** As for wildlife impacts, we find the analysis of water impacts to be incomplete, as follows:

- Response  
3A.6
- a. **Impact of Impervious Surface:** The DEIS claims that only 11 acres of the development consist of impervious surface. However, the equestrian facility alone is 11 acres and is described as being close to impervious in order to manage horse waste. The amount of impervious and “functionally impervious” surface in the equestrian facility requires further explanation. The significant increase in impervious and functionally impervious surface above the pond and uphill from Clove Creek, as well as changes in water flow due to increased water withdrawal, and loss of natural vegetation, may change water quality downstream. This has not been sufficiently studied or mitigated.
- Response  
3A.14
- b. **Incomplete Study of Pond and Creek:** The DEIS (Appendix C) includes a report from Allied Biological (now Solitude Lake Management) disclosing that water quality was only studied on a single day (of an especially dry year) – June 29, 2015. The report acknowledged this did not give a complete picture and that a proper study should take place over May through September. Despite four years passing since this recommendation was made, and that water quality was identified in the Planning Board’s Determination of Significance in June 2018, the complete study recommended by Allied Biological/Solitude is not included in the DEIS. Therefore, the study of water quality appears incomplete, based on the Limnology section in DEIS Appendix C.

**Response 3B.14** c. **Inadequate Studies of Vernal Pools:** Vernal Pools, an important wetland resource, have not been properly studied, as noted above. Apart from serving as important wildlife habitat, vernal pools play an important role in the detention and infiltration of waters, as well as de-nitrification of the waters they collect.

**Response 3A.15** d. **Severe Impact of Proximity to Water:** The adverse impact of development so close to water resources as identified in the Lathrop paper in Appendix P has been overlooked in the impact analysis.

**Response 3A.19** e. **Chazen Study on Priority Parcels for Clove Creek Aquifer:** We include a new analysis from the Chazen Companies on the relative importance of this area to the Clove Creek Aquifer and suggest it be considered in the impact analysis.

(3) **Zoning and Land Use (Section IV.C of DEIS):** The conserved open space is made up of two (2) disconnected segments, separated by the houses on the west side of the pond. In addition, it includes the large equestrian facility, and a strip of land in between two rows of houses along the historic road. This design is inconsistent with the zoning code, as follows:

**Response 3C.3** a. **Requirements for contiguous open space and wildlife corridors as defined in zoning code 175-19 and 175-20 are not met.** The conserved open space is cut into two pieces, creating a barrier to one important wildlife corridor and severely restricting another. There appears to be no mitigation proposed for this.

**Response 2.65** b. **The equestrian facility 11 acres should not be included in the conserved open space because it is inconsistent with 175-21 A(3)(b) of the code, which says "agricultural structures shall be permitted on preserved open space land, provided that they do not impair the conservation value of the land".** The equestrian facility appears to be a fully developed area and consists mainly of impervious (or functionally impervious) surface.

**Response 2.54** c. **Requirements for the conserved open space to be structured in way that does not adversely interfere with management and protection of conservation values in zoning code 175-21 is not met.** No mitigation or avoidance of these problems is proposed.

**Response 3D.6** (4) **Community Character (Section IV.D of DEIS):** The proposed site plan is one of a sprawling subdivision spread across the developable area of the property, and placing the undevelopable areas in a conservation easement. The DEIS does not include a visual analysis or simulation from Scofield Ridge or Fahnestock State Park as required in V.D.b.1 of the Final Scope. Rather, there only is a site-line illustration from Scofield Ridge. While DEIS Appendix T promises a viewshed analysis of nine scenic points along Scofield Ridge, those pages are missing from Appendix T and do not seem to be elsewhere in the DEIS. In any case, the viewshed document in Appendix T is from 2011 for a proposed soil mine and not for the proposed Conservation Subdivision. There is also no viewshed analysis from Fahnestock State Park, even though this area is specifically flagged in the Philipstown Natural Resources and Open Space Plan as being visible from trails in Fahnestock.

**(5) Proposed Remedies to Analysis Deficiencies and Mitigation of Impacts:** In order to complete the analysis of significant impacts identified in the Determination of Significance by the Planning Board, and to mitigate identified impacts, we recommend these 8 actions:

- Response 3B.14 (i) **Conduct a comprehensive study of vernal pools during the appropriate seasonal window (March-April) and complete a full study of amphibians and reptiles. Mitigate impacts on these and all identified NY Species of Special Concern, once these studies are complete.**
- Response 2.65 (ii) **Exclude the 11-acre equestrian facility from the conserved open space, in order to comply with 175-21 A(3)(b) of the zoning code, since the intense development of that land significantly impairs the conservation value. Also, remove the historic road from inclusion in the conserved open space to simplify conservation easement management.**
- Response 4.9 (iii) **Remove the five houses on the West Side of Ulmar Pond and relocate them to be clustered with others to the northwest side of the property. This will preserve the wildlife corridor between Clove Creek and Ulmar Pond, place the conservation easement on contiguous protected land, and help mitigate impacts on NY Species of Special Concern.**
- Response 3B.27 (iv) **Reconfigure the equestrian facility to move the horse trailer parking area, in order to widen the wildlife corridor from the eastern slopes of the property to the pond.**
- Response 3D.8 (v) **Complete visual simulations of the development from viewpoints in Hudson Highlands and Fahnestock State Parks. Take appropriate mitigation steps once impacts are known.**
- Response 3A.16 (vi) **Require ongoing testing in Ulmar Pond and Clove Creek before, during and after construction, and on an ongoing basis, as a condition of site plan approval. Require that the Town oversee the testing, paid for by the applicant or the Homeowners Association (HOA), and that construction and/or use of the equestrian facility be halted pending remediation, should water quality deteriorate. Require monthly testing of the pond and creek during construction. Mandate quarterly testing after construction. Require a performance bond or letter of credit for water testing costs be posted by the applicant, to be drawn upon in case of default by the HOA. Require similar testing and mitigation steps for the Clove Creek Aquifer, and especially monitoring of the common sewerage treatment system under the horse turnout paddock and the impact it has on the aquifer.**
- Response 2.49 (vii) **Require that the conservation easement holder be nationally accredited by the Land Trust Accreditation Commission. [www.landtrustaccreditation.org](http://www.landtrustaccreditation.org). Given this is the first Conservation Subdivision in Philipstown, specialized expertise will be needed to monitor and enforce such a complex easement involving possible encroachments by 25 homeowners and users of a large commercial equestrian facility.**
- Response 2.68 (viii) **Require that the equestrian facility be closed by the town if horses are being used on the property outside of the equestrian facility in violation of the proposed conservation easement, as a requirement of site plan approval.**

**DETAILED COMMENTS FOR EACH PART OF SECTION IV OF DEIS REPORT**

**Area of Concern #1: Vegetation and Wildlife (Section IV.B of DEIS)**

**a. Incomplete Studies of Amphibians and Reptiles:**

- **Vernal Pools have not been properly studied.** In October 2018, HHLT hired Dr. Michael Klemens (a renowned herpetologist, whose bio is attached in Exhibit A) to review the environmental studies submitted by the applicant in their July 21, 2016 Conservation Analysis, included in Appendix C of the DEIS, and used to support the conclusion that there are no areas observed that would support vernal pools on site (DEIS Page 88). Dr. Klemens summarized his findings in a memorandum to HHLT, which concluded that the vernal pool study was conducted too late in the year (May 2015) to be able to detect the presence of vernal pools. However, he also found in the record that an indicator species of vernal pools, namely, wood frogs, are present on site and described as being ubiquitous across the local area (Page 89 DEIS). Dr. Klemens informed us that vernal pools can only be properly identified in March – April studies. His letter can be found in Exhibit B. We also sought advice from Dr. William Schuster, the Executive Director of the Black Rock Forest Consortium, another well-respected scientist in New York State, about the window for conducting vernal pool studies in the Hudson Highlands, and he also informed us that it is March to April. His letter is included in Exhibit C.

Response  
3B.14

Furthermore, we note that 2015 was an especially dry year, with water shortages by summer and an approximate six (6) inch deficit in precipitation by May 2015 across the county, according to data found here: <https://www.ncdc.noaa.gov/cag/county/time-series/NY-079/pcp/1/5/1895-2019>. The time of year and rainfall deficit combined, make May 2015 a poor choice for looking for evidence of vernal pools.

A few excerpts from Dr. Klemens' memorandum to HHLT dated October 2018 summarize his concern that vernal pools have not been properly studied on the site, based on the applicant's language on Page 88 and in Appendix C of the DEIS: *"One of the most troubling inconsistencies in the report is the statement that there are no vernal pools on the site, yet, a vernal pool indicator species, the wood frog, *Rana sylvatica*, was observed on the site on May 22, 2015. This means that somewhere, either on or off the site, a stand-alone depressional vernal pool or a vernal pool imbedded within a larger wetland (=cryptic vernal pool) exists. In 2015, the first field herpetological field visit occurred on May 6th. This was far too late in the season to document calling wood frogs, or even detect their egg masses. This type of field work needed to occur in March through early April."* and he said:

Response  
3B.39

*"Identification and mapping of vernal pool areas on and off the site is an essential missing component of the Conservation Analysis. Some potential areas that may have vernal pool functions include floodplain depressions along Clove Creek, shallow fringing areas of Ulmar Pond that are essentially free of predatory fish, or as-of-yet undetected vernal pools in the forests, on or off site. Once pools are mapped, then the impact of the proposed layout and its consistency with Calhoun and Klemens (2002) can be determined."*

Response  
3B.40



We note that Page 86 of the DEIS in Section IV.B.1.b on Existing Wildlife Conditions refers to the Biodiversity Assessment of the North Highlands which describes vernal pools, referring to them as Intermittent Woodland Pools, as follows:

*“Intermittent Woodland Pools (IWPs) are scattered throughout the study area. The Biodiversity Assessment Manual defines them as shallow pools, “surrounded by upland forest, usually retaining standing water during winter and spring but drying up by mid-summer of most years”. The manual goes on to point out that “these small habitats are often damaged because their values are not appreciated by landowners, or because they are overlooked in the environmental reviews of development projects.”*

Given that this development is a Conservation Subdivision, proper study of vernal pools should be conducted and the site plan responsive to protecting this habitat.

Response  
3B.28

The DEIS also omits the presence of salamanders living on site (DEIS Page92). However, the Conservation Analysis (Appendix C CD Page 237) clearly documents the presence of two species of salamander found by herpetologist Brandon Ruhe in his June and July 2014 site visits. Thus, it is apparent that amphibians have not been properly studied on the site. The presence of salamanders is not acknowledged in the body of the DEIS (despite the data that supports it in the Conservation Analysis in Appendix C), indicating that their habitat protection has not been considered.

Response  
3B.14

It is essential that a proper study of vernal pools be conducted, which means conducting the study in the March-April window, and would therefore need to be conducted in 2020 at the earliest. This is the only way to understand the full range of amphibian habitat on the site and the sensitive areas where development should be avoided, especially since a number of salamanders potentially occurring on the site are NY listed “Species of Special Concern” (specifically Jefferson and marbled salamanders).

<https://www.dec.ny.gov/animals/7494.html>

Response  
3B.29

- **Lack of Study for Presence of Box and Wood Turtles:** The “potential developable area” of the site is heavily developed in the proposed site plan (DEIS Figure 15). While much effort has been expended in studying Timber Rattlesnake presence on the site, very little has been expended on the extent of the presence of Eastern Box and Wood turtles (in addition to the absence of amphibian studies) who would prefer such habitat, and are both listed as species of Special Concern in New York State. The letter from Dr. Klemens in Exhibit B states: “[...] nor efforts to ascertain the use of the so-termed “medium conservation value” central portion of the site for wood and box turtles. Such open and disturbed areas are actually very valuable for ecotonal species including both these turtles as well as a variety of snakes.”

- b. **Insufficient Mitigation of Significant Impacts:** Four NY “Species of Special Concern” are mentioned in the DEIS, including two that were observed on the property – eastern box turtle and red shouldered hawk. The DEIS stated: “It is therefore critical that the proposed

Response  
3B.24

*project preserves this portion of the property, and as much as possible of other forested portions of the site as contiguous habitat, including measures to preserve wildlife corridors throughout the site.” (DEIS Page 99). However, no specific mitigation steps for the impact of the fully developed area on their habitat or these corridors were offered other than mention of the conservation easement on the upland slopes (DEIS Page 99) and mitigation incidental to steps taken to protect bat habitat.*

The DEIS also mentions on Page 107, the following about the red-shouldered hawk:

*“The New York populations have steadily declined, and the primary causes are loss of habitat, logging, agriculture, and suburban development. The raptor usually nests high in the crotch of a tree and commonly in relatively large tracts of moist woodlands almost always near open water or wetlands. These raptors tend to be secretive and avoid inhabited areas. Therefore, site development could discourage the hawk from nesting and foraging on the site.”*

Response  
3B.30

Based on this language in the DEIS, current nest sites are likely to be near the pond area, which is ringed by residential properties in the proposed site plan. Other than stating that limiting tree removal to sometime prior to mid-May or after mid-August will “*minimize any potential impact on a nesting red-shouldered hawk, should a nest be present*” (DEIS Page 99), no sufficient actions to mitigate the impact of the houses ringing the pond are given in the DEIS.

Response  
3B.31

Eastern box turtles prefer bottomland forest over hillsides and ridges and evidence of them has been found on site near the wetlands (DEIS Page 89). Since they are likely to favor the “potential developable area” portion of the site (shown on DEIS Page 15) that is almost fully developed, versus the upland steep slopes, we would expect to see mitigation steps included in the DEIS to protect their habitat. However, the only mitigation proposed is to relocate them away from their preferred habitat if they are found onsite during construction (DEIS Page 99). Relocation of Eastern Box Turtles has been proven to result in increased mortality. (See Bridget M. Donaldson, Arthur C. Echternacht "Aquatic Habitat Use Relative to Home Range and Seasonal Movement of Eastern Box Turtles (*Terrapene carolina carolina*: Emydidae) in Eastern Tennessee," *Journal of Herpetology*, 39(2), 278-284, (1 June 2005))

Box turtles have a strong sense of home range and are likely to return to the area from where they have been removed. Also, a mosaic of open field, forest and wet areas are important for the box turtle, yet no mitigation is considered for the box turtle’s long-term reduced access to the pond and its fringing wetlands, nor for the loss of the open field and edge habitat proposed for development.

No mitigation actions were identified for the two additional Species of Special Concern that were identified as having “suspected” presence on the property—eastern hognose snake and eastern worm snake—aside from protection of the 50+ acre forested parcel. Eastern hognose snakes feed primarily on toads (Source: University of Florida Herpetology

Department, <https://www.floridamuseum.ufl.edu/herpetology/fl-snakes/list/heterodon-platirhinos/>). The American toad, which was observed on the property, breeds in “the shallow waters of ponds, ditches, lakes, marshes, and wet meadows” according to NY DEC Frogs & Toads of New York State fact sheet. Disturbance of the pond on site may reduce the eastern hognose snakes’ primary food source.

Response  
3B.32

As with eastern box turtles, relocation would not be a viable mitigation action for this species, as it is associated with heightened mortality and reduced ecological fitness.

(Plummer, Michael V., and Nathan E. Mills. “Spatial Ecology and Survivorship of Resident and Translocated Hognose Snakes (*Heterodon Platirhinos*).” *Journal of Herpetology*, vol. 34, no. 4, 2000, pp. 565–575. JSTOR, [www.jstor.org/stable/1565272](http://www.jstor.org/stable/1565272)).

Response  
3B.33

Also, potential impacts to wood thrush, a Species of Greatest Conservation Need, were not adequately addressed. The wood thrush management guidelines cited in Appendix Q recommend giving “special consideration to sites with features that naturally maintain vertical layering and horizontal patchiness, such as hillsides, streams, and wooded wetlands.” Wood thrush access to the stream and wetlands on the property are not adequately addressed, and would be essentially blocked by the proposed development. The proposed development does not adequately match the cited Figure 7 of an ideal conservation subdivision, but rather creates excessive forest edge with its current design.

- c. **Necessary Wildlife Corridors are Blocked:** In 2014 Steven Coleman, a wetlands scientist and ecologist, recommended two important wildlife corridors be protected on the property, as documented in the Conservation Analysis (see Appendix C, CD), Page 7:

Response  
3B.34

*“Mr. Coleman recommends that corridors be maintained between the pond and upland to facilitate movement of wildlife through the property. He also recommends that corridors be left open to allow migration between the pond and Clove Creek.”*

And in his September 2014 letter on Page 232 of the Conservation Analysis:

*“The location of the proposed development (houses around the pond, road networks and equestrian facilities) may interfere with some of the movement patterns of wood turtles and other reptile and amphibian species that may travel between the Creek wetlands and the adjacent pond to the southwest, and also make the site less attractive to forest interior bird species.*

*In particular, the east-west and south-north movement throughout the subject parcel may be restricted from the proposed layout. Provisions should be made as part of the subdivision layout to accommodate the ability of wildlife species to move freely throughout the site. This is especially important to allow movement corridors between the adjacent Clove Creek wetlands and the pond in the southern portion of the parcel, and also maintaining a south to north connection along the eastern side of the parcel.”*

The corridors recommended by Mr. Coleman will be blocked or constricted in the proposed site plan. The corridor between Clove Creek and Ulmar pond is blocked by the houses and road ringing the western side of the pond. The corridor between Ulmar Pond and the upland habitat to the east is significantly constricted by the expansive footprint of the Equestrian Facility.

Shortly after his September 2014 report, Mr. Coleman appeared to no longer be engaged on this project, but his recommendations remain a crucial mitigation finding documented in the DEIS but not reflected in the current Site Plan.

The environmental consultant hired after Mr. Coleman, Mr. Steven Gross, discounted this wildlife corridor in a letter to the Planning Board dated March 16, 2017 saying that *“The pathway suggested in the HHLT letter would involve crossing a prohibitively steep 76% slope, and does not represent a wildlife corridor deserving of any protective measures.”* We sought advice from Dr. Michael Klemens on the ability of amphibians and reptiles to traverse steep slopes and received the following response, as shown in the letter in Exhibit B:

*“Coleman calls for a large east-west corridor to be left between Clove Creek (a known habitat for the wood turtle, *Glyptemys insculpta*) and Ulmar Pond, but subsequent testimony in the record (via letters and verbal comments from the applicant’s environmental consultant) states that the slope is too steep to allow passage from Clove Creek east to the project site and the need for this broad corridor is dismissed. This is complete nonsense as wood and snapping turtles have been observed climbing over chain link fencing. While not able to climb over vertical fencing like wood and snapping turtles because of their high domed shells (which have a different center of gravity than the dorsally compressed snapping and wood turtles), box turtles clamber up and down very steep talus slopes at West Rock Ridge (New Haven/Hamden CT). As far as amphibians and snakes are concerned, they navigate up and down slopes without difficulty.”*

We note that documentation of the inability of amphibians and reptiles to traverse steep slopes does not appear to be included in the DEIS, and therefore the Coleman recommendation for changes to the site plan to preserve wildlife corridors does not appear to be contradicted in the DEIS.

- d. **Limited Discussion of Impact of Equestrian Facility on Wildlife:** The DEIS Final Scope called for a description of the impacts on wildlife, *“including from the equestrian center.”* (Final Scope adopted July 19, 2018 Section V.B.2.) Thus, the DEIS should have included a discussion of impacts on wildlife movement between the eastern slopes and Ulmar Pond as alluded to in the Coleman 2014 letter mentioned above (Conservation Analysis Page 232).

Response  
3B.35

However, the main discussion of the impact of the equestrian facility in this section of the DEIS is simply the rationale for it as a permissible use, rather than its impact on wildlife movement corridors and how that will be mitigated (DEIS Section IV.B.2.b.1 at Page 101).



- e. **Outdated Science on Landscape Fragmentation:** The main source of information on fragmentation cited in the DEIS is the Lathrop 1998 paper about Sterling Forest. This paper is now 20 years old and in the intervening two decades both mapping technology and the science of analyzing the effects of fragmentation and perforation has progressed significantly, and these more up-to-date approaches should be used to create a site design that fully protects natural resources. Fragmentation is a multifaceted issue that includes many aspects e.g. sound, light and chemical pollution, in addition to loss of contiguous forest and habitat/forest perforation. A forest may be effectively fragmented without visually appearing to be so, and simple straight line pathways are now no longer understood to factor in the full set of obstacles in movement across the landscape (Beier, Paul. (2018). A rule of thumb for widths of conservation corridors: Width of Conservation Corridors. Conservation Biology. 10.1111/cobi.13256.).

Response  
3B.60

Also, fragmentation is now defined, in part, by functional loss within the ecosystem: whether wildlife continue to have the ability to access different habitats for their different needs that they seek during daily, seasonal, annual, or lifecycle-based migrations.

The Lathrop Paper also specifically mentions the sensitivity of three wildlife species in a nearby area of the Highlands region (Sterling Forest), one of which is found on the property: red-shouldered hawk. It specifically sites the red-shouldered hawk's need for both "forested wetlands and adjacent upland forest" (p. 34), underscoring again the need for species' access to different habitats, like both water and forests.

Response  
3B.61

Further, the Lathrop study states that its methodology is not meant for specific development siting, but rather it is a landscape overview. Lathrop Paper DEIS Appendix P Page 35 (or Page 11 of the PDF file) says: "*this analysis was not designed to assess specific site suitability (i.e., for individual building placement).*"

Response  
3B.62

The methodology in the Lathrop paper creates a composite model of five (5) criteria to assess development constraints (listed on p.32 in Table 1). The applicant applies only one (1) of these criteria – proximity to existing infrastructure (or "habitat fragmentation potential") – and does not factor in criteria such as proximity of development to water resources. Using just one criterion would not qualify as using the same methodology. In particular, one of the excluded criteria is proximity to water resources, and if that were included, the houses around the pond would likely have been found to have a severe adverse environmental impact, based on the Lathrop paper model.

Response  
3B.63

The environmental suitability assessment for Sterling Forest (that was addressed in the Lathrop paper) was a starting point for understanding the site constraints. The Lathrop paper authors explicitly describe other considerations that were also important but not captured by the spatial assessment, including the need to cluster the development, which has not happened in this site plan due to the spreading of the houses and equestrian facility throughout the entire developable area of the site (Lathrop Paper DEIS Appendix P Page 35, 37 or PDF pages 11, 13).

Response  
3B.64

Again we consulted Dr. Michael Klemens on this issue and the response was (See Exhibit B):

Response  
3B.60

*“The applicant’s responses to concerns about fragmentation caused by the site plan are based largely on Lathrop’s (1998) paper. While in no way disparaging this work, I should point out that the field of conservation biology, conservation design, and application of scientific data into the conservation design process has expanded tremendously in the intervening two decades. A review of Johnson and Klemens’ 2005 volume *Nature in Fragments: The Legacy of Sprawl* (Columbia University Press) begins to nuance many of the challenges in Lathrop’s 1998 paper.”*

We suggest that this more updated science be applied to site plan design.

#### **Area of Concern #2: Water Resources (Section IV.A of DEIS)**

Response  
3A.6

- a. **Impact of Impervious Surface:** The DEIS states that 11.1 acres of the property consists of impervious surface (DEIS Page 51). However, the size of the equestrian facility alone is 11 acres and from the description of it, most of it appears to consist of a substrate approximating impervious surface in order to manage horse waste. Therefore it is hard to understand how only 3.5 acres of impervious surface are assigned to the equestrian facility. More detail needs to be provided as to what is treated as impervious versus permeable in the equestrian facility.

Response  
3A.7

Additionally, the equestrian facility’s significant increase in impervious surface and forest clearing near the pond and uphill from Clove Creek, as well as potential changes in water flow due to increased water withdrawal for water supply and cleaning for 40 horses, may change surface water quality in terms of sedimentation, flow rate, and temperature. Clove Creek and the stream tributary that connects Ulmar Pond to it are considered “valuable and sensitive fisheries resources” according to NYS DEC. The impact of the commercial equestrian facility to native brook trout populations is not addressed.

Response  
3A.14

- b. **Incomplete Study of Pond and Creek:** In summarizing the report from Allied Biological, in Appendix C of the DEIS, commentary on Page 144 of the Conservation Analysis says “*Water quality monitoring was conducted on one date in late June for this baseline study (June 29 [2015]). We understand that this is not ideal, but the project timeline restricted us to one sampling date. A much more complete picture of the fluctuating water quality would have been obtained if sampling occurred throughout the entire growing season (typically considered May through September in the northeast). Future water quality monitoring efforts in this basin should strongly consider full season sampling efforts, of at least three sampling dates.*” Despite this recommendation from four years ago (i.e. in 2015), and the Planning Board’s requirement for a full environmental review including water impacts in June 2018, the DEIS does not include the water quality study recommended by Allied Biological.

Response  
3B.14

c. **Inadequate Studies of Vernal Pools:** The fact that vernal pools have not been studied properly as indicated in Area of Concern #1 implies that the understanding of hydrology and water resources on the property is incomplete.

Response  
3A.15

d. **Severe Impact of Proximity to Water:** The DEIS relies heavily on the Lathrop paper in Appendix P to justify the siting of the 25 houses spread out across the property from North to South. However, that analysis ignores another key criterion for conservation development used in the Lathrop paper, which is proximity to water resources. Here the Lathrop paper suggests that anything within 300 feet of surface waters will have a severe adverse environmental impact (Lathrop Paper DEIS Appendix P Page 33, Fig. 2 B). This would apply to the houses around the pond.

Response  
3A.19

e. **Chazen Study on Priority Parcels for Clove Creek Aquifer:** In October 2018, The Chazen Companies performed an analysis for HHLT on land parcels that have the highest impact on the flow of water into the Clove Creek Aquifer. Based on soils, slopes, land cover and amount of land directly over the Clove Creek Aquifer (CCA), the Hudson Highlands Reserve parcels are some of the most valuable for ensuring the sustainability of the CCA on both a per acre and total acreage basis. The Planning Board should carefully consider the impact on the Clove Creek Aquifer of this development, given the parcels' importance to the Aquifer. Maps and methodology from The Chazen study are attached as Exhibit D.

#### Area of Concern #3: Land Use and Zoning (Section IV.C of DEIS)

Response  
3C.3

a. **Requirement for Contiguous Open Space and Wildlife Corridors is Not Met:** Section 175-19B of the Zoning Code states: "*Conservation subdivision results in the preservation of contiguous open space and important environmental resources [...]*". Section 175-20H (2) states that the required open space must be "*protected from development by a conservation easement and does not result in fragmentation of the open space land in a manner that compromises its conservation value.*" However, the applicant's proposed conserved open space is cut in two distinct pieces by the houses that line the western side of the pond. This fragments habitat for amphibians and reptiles as noted in the Coleman September 2014 letter included in the Conservation Analysis (Appendix C CD Pages 7 and 232). Furthermore, the layout of the equestrian facility constricts the corridor from the steep slopes on the east side of the property to Ulmar Pond.

Response  
3B.25

Coleman noted the need to maintain a robust wildlife corridor between Clove Creek and Ulmar Pond and also between the upland habitat and Ulmar Pond. While this need does not appear to be contradicted elsewhere in the DEIS and its Appendices, the site plan does not reflect this recommendation. Therefore, the DEIS indicates that the site plan causes fragmentation of habitat with an adverse environmental impact that is not mitigated.

Response  
3C.3

As stated above, the zoning code provides that the preserved open space in a conservation subdivision must not result in fragmentation of the land in a manner that "compromises its conservation value". Thus, protected open space in a conservation subdivision must be contiguous and preserve important environmental resources. The slicing of open space into

two pieces, and the failure to adequately protect documented wildlife corridors as evidenced by the conflict between the proposed site plan and the Coleman letter, compromises the conservation value resulting in a site plan that does not comply with 175-19B or 175-20H.

Response  
2.65

b. **The equestrian facility 11 acres should not be included in the conserved open space because it is inconsistent with 175-21 A(3)(b) of the code.** Section 175-21 A(3)(b) says *“agricultural structures shall be permitted on preserved open space land, provided that they do not impair the conservation value of the land”*. The equestrian facility appears to be a fully developed area and consists mainly of impervious (or close to impervious) surface. Even the turnout paddocks and outdoor arena will be developed with near impervious surface, impairing the conservation value. The remainder of the equestrian facility consists of buildings and horse trailer parking that clearly impair conservation values.

Response  
2.55

c. **Requirements for Conserved Open Space are not Met:** Section 175-21A(1) of the Zoning Code states: *“The open space protected must include all the land determined pursuant to § 175-20A(4) to have the most conservation value and, subject to § 175-20H, as much other land having conservation value as possible (as established by the conservation analysis and conservation findings)”*. This requirement is not met because almost all of the “potential developable land” (DEIS Figure 15) is developed, and yet much of that land is important for wildlife as noted in the Coleman 2014 letter, and as preferred habitat for NYS Species of Special Concern that use the site, as discussed in Dr. Klemens letter in Exhibit B. Furthermore, if the deficiencies in the applicant’s wildlife studies around vernal pools, amphibians and reptiles are corrected, it is likely this habitat will be found in this “potential developable area” also.

Response  
4.8

We believe a site plan can be constructed so that all of the five (5) houses on the western side of the pond can be relocated away from the pond, where most of the other houses are, while still maintaining 1-acre size lots. We engaged LandVest, Inc. to draft a conceptual plan of how 24 houses could all be located away from the pond on 1-acre lots and this configuration is shown in Exhibit E. We note that they relied only on publicly available information and did not visit the site. In addition, we think the equestrian facility can be reconfigured to move the trailer parking, in order to facilitate a wider corridor between the eastern slopes and the pond.

Response  
4.10

While the DEIS says that moving a house away from the pond reduces its value by 65% (DEIS Page 145), the freeing up of most of the pond area for common passive recreational use by all residents will likely increase the value of all houses in the subdivision significantly, potentially offsetting this impact.

Response  
2.54

Section 175-21A (3)(b) of the zoning code states *“The configuration of the open space land and dwellings shall not result in fragmentation of the open space land in a manner that interferes with its proper management and protection of its conservation values.”* We have already commented that the configuration of the open space cuts off one important wildlife corridor (between Clove Creek and Ulmar Pond) and constricts another (between

the eastern slopes and Ulmar Pond). In addition, because of the houses wrapped around the pond and the easement land going in between the rows of houses on either side of the old road, all houses face the conservation easement, without natural or manmade barriers (such as a road). This means that an easement holder must face potential violations and encroachments from 25 different homeowners, as well as users of the equestrian facility. This layout makes easement monitoring and enforcement excessively cumbersome and adversely interferes with proper management of the conservation values.

**Area of Concern #4: Community Character (Section IV.D of DEIS)**

**Response 3D.7** The layout of the subdivision is similar to a sprawling suburban subdivision spread across the entirety of the developable area of the property.

**Response 3D.8** The Final Scope called for a visual analysis of the subdivision from both Scofield Ridge in Hudson Highlands State Park and from Fahnestock State Park (Final Scope V.D.1.b.). No such visual analysis is provided in the DEIS. Rather, DEIS Page 136 shows a site-line illustration between Scofield Ridge and the proposed development, but does not show what the development would look like from Scofield Ridge – i.e. a visual simulation. Appendix T includes an old visual study for a soil mine from 2011, but nothing specific to this Conservation Subdivision. The visual study in Appendix T references Exhibits M4 – M12 with the viewshed analysis for nine viewpoints on hiking trails along Scofield Ridge, but those pages are **not included in Appendix T of the DEIS** (only Exhibit M1 is included). Therefore, the DEIS does not appear to include any viewshed analysis or visual simulations along Scofield Ridge. Even if it did include the old analysis from the mining project, it would not be suitable to reflect the visual impact of the Conservation Subdivision.

**Response 3D.9** Furthermore, no visual analysis from Fahnestock State Park is included, even though the Philipstown Natural Resource and Open Space Plan specifically calls out visual impact of this area as one reason why it was identified in the Open Space Inventory, as Area 17: East Mountain (Natural Resource and Open Space Plan Page 9). The rationale for including the area proposed for Hudson Highlands Reserve in the town's Open Space Inventory reads as follows:  
*"Within the Clove Creek watershed, this area includes residential parcels accessed from East Mountain Rd North and South, Esselborne Rd, and Horton Rd. The ridge is visible from Route 9 and from trails in Clarence Fahnestock State Park."* (Open Space Index Page 4.)

**Exhibits Attached:**

Exhibit A – Bio for Dr Michael Klemens

Exhibit B – October 2018 letter from Dr. Michael Klemens summarizing his review of the contents of Appendix C to the DEIS (which has not changed since October 2018)

Exhibit C—Letter from Dr. William Schuster of Black Rock Forest on the appropriate window to conduct vernal pool studies

Exhibit D – Chazen Report on priority parcels for Clove Creek Aquifer

Exhibit E – LandVest alternative site plan design to move houses away from Ulmar Pond



## **EXHIBIT A**

### **Dr. Michael Klemens Bio**

**Dr. Klemens is a conservation biologist with research interests in biogeography and ecology of amphibians and reptiles, ecologically informed land use planning, and the conservation biology of freshwater turtles and tortoises. He founded the Metropolitan Conservation Alliance (MCA), a consortium of municipalities, planners and scientists working together to improve the stewardship of natural resources in the Hudson Valley and Connecticut. MCA and Dr. Klemens earned an achievement award from the American Planning Association recognizing accomplishment in integrating complex ecological data into the land-use decision-making process. In 2011, Adirondack Wild: Friends of the Forest Preserve retained Dr. Klemens as an expert witness at the Adirondack Club and Resort adjudicatory hearing. In addition to his consultancy with Adirondack Wild, Dr. Klemens is a Research Associate in Herpetology at the American Museum of Natural History and serves as gubernatorial appointee to the Connecticut Siting Council which determines the placement of telecommunications and energy generation facilities statewide within Connecticut. He is the Chair of the Planning and Zoning Commission in his home town of Salisbury, CT, and has worked for many years with the Wildlife Conservation Society, the Cary Institute of Ecosystem Studies and served as a consultant for various government agencies and not-for-profit organizations.**

Michael W. Klemens, LLC  
POB 432  
105 Main Street  
Falls Village, CT 06031  
October 10, 2018

Michelle Smith, Executive Director  
Hudson Highland Land Trust  
POB 226  
20 Nazareth Way  
Garrison, NY 10524

Dear Michelle:

Let me begin by stating that it is very difficult to be handed off volumes of material to review and from that to try to piece together the ecological review history (or lack thereof) concerning this project. So, if I make an error in recounting the sequence of events over the last years, please call these to my attention. From what I am reading studies on this project date back at least to 2009, and there have been various attempt to develop this property including a proposed mine.

#### THE RECORD

Compounding the difficulty of reviewing this file are that there have been many studies conducted on the site by different consultants, and the subject site has been enlarged in this process to add additional parcels of land to meet various set-aside and access requirements. This has resulted in an apparently uneven study of the entire six-parcel site, and indeed some of the studies are in conflict with one another. Nowhere is there a summary of efforts expended in biological inventory, the researcher's hours, and the seasonality of the studies. It is well known that by missing certain seasonal activity windows, species can be overlooked. While documenting a species "presence" is quite straightforward, documenting a species "absence" is far more labor intensive. If one reviews the Federal (USFWS) Bog Turtle Recovery Plan that I wrote for the USFWS in 2001, you will note that we attempted to standardize efforts required to demonstrate an "absence" that included strict standards for person-effort per acre, number of visits, seasonal timing, and weather conditions for such studies. I bring this up only to illustrate the difficulties of concluding species absence with confidence absent a structured study that optimizes the potential for species detection by gearing sampling to coincide with the correct seasonal activity windows for the target species and provides for repeated sampling to conclude an absence.

Response  
3B.36

The mere generation of piles of paper, much of it repeated in the Conservation Analysis and Environmental Assessment volumes, does not necessarily equate to due diligence on the site. What has occurred here is that studies were added in a step-wise process as additional parcels were incorporated, and by that very process has resulted in a record that is both uneven in study effort, but more seriously deficient and at times in conflict with previous studies.

We are provided with summaries of the work by Hudson Highlands Environmental Consulting (August 12, 2015) which is a practice I have termed "corporatized science" where the individual consultants

Response  
3B.37

reports are not submitted, but a summary created by a project manager. While these managers may be scientifically credentialed, what other scientists really need to be able to review the reports are the actual field data and reports of the sub-consultants, not summaries. What I would need to see are those primary data to assess whether or not sufficient effort has been expended on all six parcels to adequately assess the biodiversity. These individuals who conducted the field work need to be present at a public hearing so they can be cross-examined by interested parties. For example, Coleman sub-contracted the timber rattlesnake surveys to Brandon M. Ruhe, a highly qualified herpetologist. What would be very useful to know is the species of amphibians and reptiles he found during the considerable time he spent on site. I have worked with Mr. Ruhe in the past, and I know that he keeps copious notes concerning any species of amphibian or reptile he encounters in the course of his field work. My concerns over "corporatized science" are not restricted to this project. If you examine recent public hearing transcripts of the Connecticut Siting Council (where I am a gubernatorial appointee) you will find that there have been several recent cases where I have requested that hearings be continued to allow the Council to hear direct testimony from the individuals conducting the research, not summaries crafted to fit regulatory frameworks by project managers.

#### HERPETOLOGICAL STUDIES

My professional expertise is that of an academically-trained conservation biologist/ecologist. My research background is in herpetology, the study of amphibians and reptiles. These two groups of vertebrates make up a high percentage of endangered, threatened, special concern, and declining species when compared to other organisms. This is in part to various constraints that are amplified by development, including poor dispersal abilities, specific habitat requirements, and in some species, primarily turtles and venomous snakes, low reproductive output. As such, these organisms are ideal to evaluate the conservation effectiveness, or lack thereof, of a proposed development. Several different individuals with herpetological expertise conducted studies on the site. But these studies in part contradict one another especially as it pertains to conservation outcomes.

Response  
3B.38

Coleman calls for a large east-west corridor to be left between Clove Creek (a known habitat for the wood turtle, *Glyptemys insculpata*) and Ulmar Pond, but subsequent testimony in the record (via letters and verbal comments from the applicant's environmental consultant) states that the slope is too steep to allow passage from Clove Creek east to the project site and the need for this broad corridor is dismissed. This is complete nonsense as wood and snapping turtles have been observed climbing over chain link fencing. While not able to climb over vertical fencing like wood and snapping turtles because of their high domed shells (which have a different center of gravity than the dorsally compressed snapping and wood turtles), box turtles clamber up and down very steep talus slopes at West Rock Ridge (New Haven/Hamden CT). As far as amphibians and snakes are concerned, they navigate up and down slopes without difficulty.

One of the most troubling inconsistencies in the report is the statement that there are no vernal pools on the site, yet, a vernal pool indicator species, the wood frog, *Rana sylvatica*, was observed on the site on May 22, 2015. This means that somewhere, either on or off the site, a stand-alone depressional vernal pool or a vernal pool imbedded within a larger wetland (=cryptic vernal pool) exists. In 2015, the first field herpetological field visit to occurred on May 6<sup>th</sup>. This was far too late in the season to



Response  
3B.39

document calling wood frogs, or even detect their egg masses. This type of field work needed to occur in March through early April. Testimony provided by the Hudson Highlands Land Trust called for up to 500-foot buffers for amphibians and reptiles. Actually, in the case of vernal pools, the critical terrestrial habitat required to sustain 95% of the vernal pool amphibian population extends 750 feet from the pool's high-water mark. While some development can be accommodated in the area between 100-750 feet from a vernal pool, it must be done in a manner consistent with the standards outlined in Calhoun and Klemens (2002) which is the "industry standard" for developments within vernal pool sheds and can be found on the Army Corps of Engineers website.

Response  
3B.40

Identification and mapping of vernal pool areas on and off the site is an essential missing component of the Conservation Analysis. Some potential areas that may have vernal pool functions include floodplain depressions along Clove Creek, shallow fringing areas of Ulmar Pond that are essentially free of predatory fish, or as-of-yet undetected vernal pools in the forests, on or off site. Once pools are mapped, then the impact of the proposed layout and its consistency with Calhoun and Klemens (2002) can be determined. While there appears to have been considerable focus on the presence of timber rattlesnakes on the site, there seems to have been no concerted efforts to evaluate vernal pool activity in March and April, nor efforts to ascertain the use of the so-termed "medium conservation value" central portion of the site for wood and box turtles. Such open and disturbed areas are actually very valuable for ecotonal species including both these turtles as well as a variety of snakes.

#### CONSERVATION ANALYSIS/CONSERVATION DESIGN

Response  
3B.60

The applicant's responses to concerns about fragmentation caused by the site plan are based largely on Lathrop's (1998) paper. While in no way disparaging this work, I should point out that the field of conservation biology, conservation design, and application of scientific data into the conservation design process has expanded tremendously in the intervening two decades. A review of Johnson and Klemens' 2005 volume *Nature in Fragments: The Legacy of Sprawl* (Columbia University Press) begins to nuance many of the challenges in Lathrop's 1998 paper. In 2006, I was the senior author on a publication entitled *From Planning to Action: Biodiversity Conservation in Connecticut Towns*. This publication received an award from the CT Chapter of the American Planning Association for integrating complex ecological information into the municipal land-use decision making process. In 2017 I authored *Pathways to a Connected Adirondack Park* which expanded much of the thinking of how local decision-makers can effectively apply conservation biology concepts.

These publications were not only a result of my academic background and research interests, but the fact that I am very familiar with the local land-use decision-making process, having served for more than thirty years as a planning board member, including the past chair of the Rye NY Planning Commission, and the current Chair of Salisbury CT Planning Commission. I know first-hand the incredible challenges local decision-makers face when confronted with divergent expert testimony, and also recognize that local decision-makers hold the future of the region's biodiversity in their hands by the manner and thoroughness in addressing these issues.

The Phillipstown code desires to encourage conservation subdivisions recognizing the incredible natural resources that occur within the Town. In particular, the code calls for protected open space in a Conservation Subdivision that "shall not result in fragmentation of the open space land in a manner that

Response  
3B.65

*interferes with its proper management and protection of its conservation values*". But like all well-intentioned regulations, it is how the theory and intent of the law plays out on the land. The primary flaw I recognize in this current approach is that, by its very evaluative nature, it has become a driver of habitat fragmentation. While it assesses areas of high and medium conservation value, the end result is protecting the high conservation value areas and intensively developing the "medium conservation value" areas as stated in the AKRF letter of July 12, 2017 (page 3) that: *Part 3 should recognize that the proposed layout of the subdivision will disturb a significant part of the property identified to have "medium conservation value" and will necessitate the removal of mature, valuable vegetation in these areas.* This effectively means that the "medium conservation value" area is being intensively developed with 25 residences and a 40-horse stable. This effectively means that any wildlife movement through the site will be significantly compromised (save those species commensal with humans) and that the "high conservation value" areas will lose important connections both within the site and to the larger ecosystem. It is also important to take note as stated in the code in Section 175-21 (A) (1) that *"The open space protected must include all the land determined pursuant to § 175-20A (4) to have the most conservation value and, subject to § 175-20H, as much other land having conservation value as possible."*

In *Pathways* (2017) I outline three scales of consideration when assessing the appropriateness of a conservation design. The first is the macro-scale, looking at how the site lies within the larger ecosystem which has been characterized in the Conservation Analysis. However, there are two additional scales that are not properly considered. The meso-scale scale examines the placement of the built environment as it impacts, or protects, the through site connection for the dispersal and maintenance of biodiversity. The proposed development eliminates connections through the "medium conservation value" area by an intensification of use that is incongruent with long-term sustainable protection. The "medium conservation value" area that has become in fact an ecological throw-away, despite the fact that conservation design standards state that not only should one protect the slopes and wetlands but also provide meaningful (functional) connectivity through the developable areas of the site to sustain the entire ecosystem.

Response  
3B.66

The concept of meaningful connectivity stems from the abuse of the corridor approach to connectivity. While certain species follow defined dispersal routes, the majority of species disperse across the landscape akin to sheet flow of water across a field. Therefore, in order to maintain habitat porosity to allow the movement of wildlife through a development site requires leaving broad areas within the "medium conservation value" area intact to connect the Clove Creek floodplain and the surrounding forest slopes. The current design, filling up most of the "medium conservation value" area with development and hardscape, in the manner proposed, will irretrievably sever the connectivity between Clove Creek and the forested slopes. In the March 13, 2018 responses to public comments on Page 8 (Comment 1.12) Hammond states correctly that "conservation subdivisions include the developer setting aside valuable, *developable* land, which may be rewarded with additional building density." More of the "medium conservation value" area needs to be protected, in a manner that protects connectivity, and that could possibly be rewarded with density bonuses elsewhere on the site. Finally, Response 1.18 on Page 12 of the response document mistakenly interprets the development as perforation, not fragmentation. Perforation maintains connections to adjacent habitats. The current development configuration for the reasons I have stated previously is not perforation, but fragmentation. It essentially creates a hardscape "wall" across the central low-lying portion of the site.

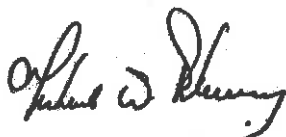
Response

3B.68

Finally, the micro-scale needs to be considered. This is very much part of the site plan design, but recognizes a host of impediments to wildlife movement created by hardscape. Ecological traps (designs that capture and kills small wildlife) such as curbs, catch basins, drains, hydrodynamic separators all need to be evaluated in terms of how they impede wildlife movement. In-ground swimming pools, which are stated as discretionary but possible on the house sites, can have a major impact on migrating wildlife. There are mitigation strategies to avoid this including wildlife-excluders incorporated into pool fencing. In short, apart from placing the site into a larger regional conservation context, the conservation analysis and design applied at the meso and micro levels fail to protect the ecological integrity of the site, and are reasonably likely to cause unreasonable and lasting significant impacts to the natural resources on and off the site.

If I can provide further detail or explanation, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael W. Klemens". The signature is written in a cursive style with a large, stylized initial "M".

Michael W. Klemens, PhD



# BLACK ROCK FOREST

65 Reservoir Road  
Cornwall, NY 12518-2135  
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F 845-534-6975  
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*Founding Chair*

Sibyl R. Golden (2007-2017)

January 29, 2019

Anthony Merante, Chairman  
Philipstown Planning Board  
238 Main Street  
Cold Spring NY 10516

Dear Chairman Merante and members of the Philipstown Planning Board,

I am writing to state that in your review of the Hudson Highlands Reserve application, a thorough examination of the whole property by a qualified biologist needs to be conducted during a narrow time window (i.e. starting early March) to confirm whether or not the property contains vernal pools. If they do exist on site, repeated surveys need to be conducted from March through April to determine what organisms they support. A number of species require the continued existence of vernal pools to survive. Since the adults generally disperse away from the pools after breeding, assessing their breeding status requires searching for and examining spermatophores- which are produced early and are quite ephemeral- and any developing eggs that are produced. Nocturnal mating calls and the presence of developing larvae are also indicative, and can only be evaluated within the same early spring time window.

This matter came to my attention in my capacity as a long time volunteer member of the board of Hudson Highlands Land Trust. I am a career forest ecologist and have been Executive Director of Black Rock Forest in Cornwall, New York, for more than 26 years, with decades of direct knowledge of its many vernal pools. I have additional personal experience surveying vernal pools and assessing the breeding status of sensitive amphibian species. I am glad to note, however, that you are also receiving information from Michael Klemens, who is undoubtedly a highly qualified and top expert herpetologist.

Please feel free to contact me if you have any questions or require additional information that I may be able to provide.

Sincerely,

William Schuster  
Executive Director

Response  
3B.14



HUDSON VALLEY OFFICE  
21 Fox Street  
Poughkeepsie, NY 12601  
P: 845.454.3980 or 888.539.9073  
www.chazencompanies.com

October 1, 2018

Revised February 27, 2019

Michelle D. Smith, Executive Director  
Hudson Highlands Land Trust  
20 Nazareth Way  
Garrison, NY 10524

## Response 3A.19

**Re: Professional Services Proposal  
Groundwater Resource Management  
Chazen Project Number 41824.00 Task 001**

Dear Ms. Smith:

The Chazen Companies (Chazen) has completed hydrogeologic analyses to identify properties with potential source water conservation value associated with the reservoir and watershed system supporting the Cold Spring and Nelsonville Water Supply (Reservoir Source) and the Clove Creek Aquifer (CCA).

The two evaluations were completed using similar methodologies, described as follows:

- Watershed delineations were completed for the CCA and the Reservoir Source utilizing ArcGIS Spatial Analyst software and USGS 10-meter resolution digital elevation models (DEMs). The mapped delineations are attached.
  - Clove Creek Aquifer watershed map. This map shows: 1) the aerial extent of the CCA from the existing Philipstown zoning maps (yellow cross hatch), 2) areas where precipitation and groundwater recharge flow into or directly onto the CCA (dark blue hatch), and 3) upland streams and their watersheds which flow onto the CCA (light blue outline). These three zones, respectively, represent the direct aquifer footprint, areas where aquifer recharge directly enters or migrates directly into the CCA, and areas where streamflow passes over and may be drawn into the CCA. The upland watershed (light blue hatch) extends marginally beyond the sheet boundaries north into Dutchess County and south into the Town of Putnam Valley.
  - Reservoir Source map. This map shows: 1) the joint Cold Spring reservoirs on Foundry Pond Road and the Foundry Brook Reservoir with adjoining water plant 2) areas where precipitation and groundwater recharge flow into these reservoirs (dark blue hatch), and 3) streams and their watersheds which flow into the reservoirs (light blue hatch). Respectively, these identify the active municipal reservoirs, areas where groundwater and stormwater flow directly into reservoirs, and areas where streams and their watersheds deliver water to the reservoirs. For planning purposes, the figure also shows Jaycox Pond and related watershed collection areas as far downstream as its outlet confluence with Foundry Brook, in case this reservoir is ever incorporated into the municipal source water system.
- For parcels within or partially within these delineation areas, Chazen completed a source water analysis to rank the water conservation value for all vacant or nominally-developed parcels. The scoring was developed as follows:

- **Hydrologic Soil Groups:** The Natural Resource Conservation Service assigned all soils into four Hydrologic Soil Groups (HSG) based on the soil's runoff potential. HSG A soils are very granular and allow most rain to recharge into the subsurface, while most HSG D soils include clay that prevents most recharge. For purposes of CCA recharge and sustained flows into Reservoirs, HSG A soils were assigned three points and HSG B soils were assigned two points. Areas with C or D soils provide nominal aquifer recharge and peak runoff to reservoirs which frequently overtop the dams so are considered of lower source water conservation value.
- **Slopes:** Steep slopes promote rapid runoff while lower slopes promote water attention in soils and vegetation allowing time for groundwater infiltration or for delayed arrival at reservoirs. Slopes under 10% were assigned three points. Slopes between 10 and 15 % received two points, and slopes between 15 and 20 percent received one point.
- **Land Cover:** Using 2011 National Land Cover Data (NLCD), non-developed land including forests, scrub/shrub, pasture/hay, and wetlands received three points. Developed open space, typically assigned for low-density rural development and cultivated crops were assigned two points, and low intensity development and barren land were assigned one point.
- **Land within the Clover Creek Aquifer:** for the CCA figure, land directly over the CCA was assigned three bonus points.

These scores were assigned on a pixel land area basis and then summed to create a total score per pixel of land area. The sum of the scored pixels values within individual parcels was calculated to determine a parcel's total conservation score. The score was also divided by the acres within the respective analysis area (CCA or Reservoir Source), yielding the score-per-acre values. Only vacant parcels of two acres or greater, or developed parcels greater than 10 acres, were included in the analyses. Attached spreadsheets provide the scoring record for all parcels evaluated in the CCA and Reservoir Source analyses.

We hope this analysis provides Hudson Highlands Land Trust and the Town of Philipstown a useful basis for considering source water conservation initiatives. Parcels scoring highly on either a "per acre" or "total score" basis can be interpreted to be of relatively higher conservation importance to the protection of water resources, whether for the current municipal reservoirs or the Clove Creek Aquifer.

We would welcome the opportunity to continue working together on water supply, water resource, or related natural resource conservation and planning initiatives. In general, the most important measures streamside protection approaches may include risk management along Fishkill Road and broadly-applied stream and floodplain setback and disturbance avoidance programs. And for the source water parcels identified by this evaluation, source water protection options range from full no-build acquisition/agreements, through less restrictive conservation agreements, to simple due-diligence reviews of site, wastewater, and stormwater designs.

Sincerely,

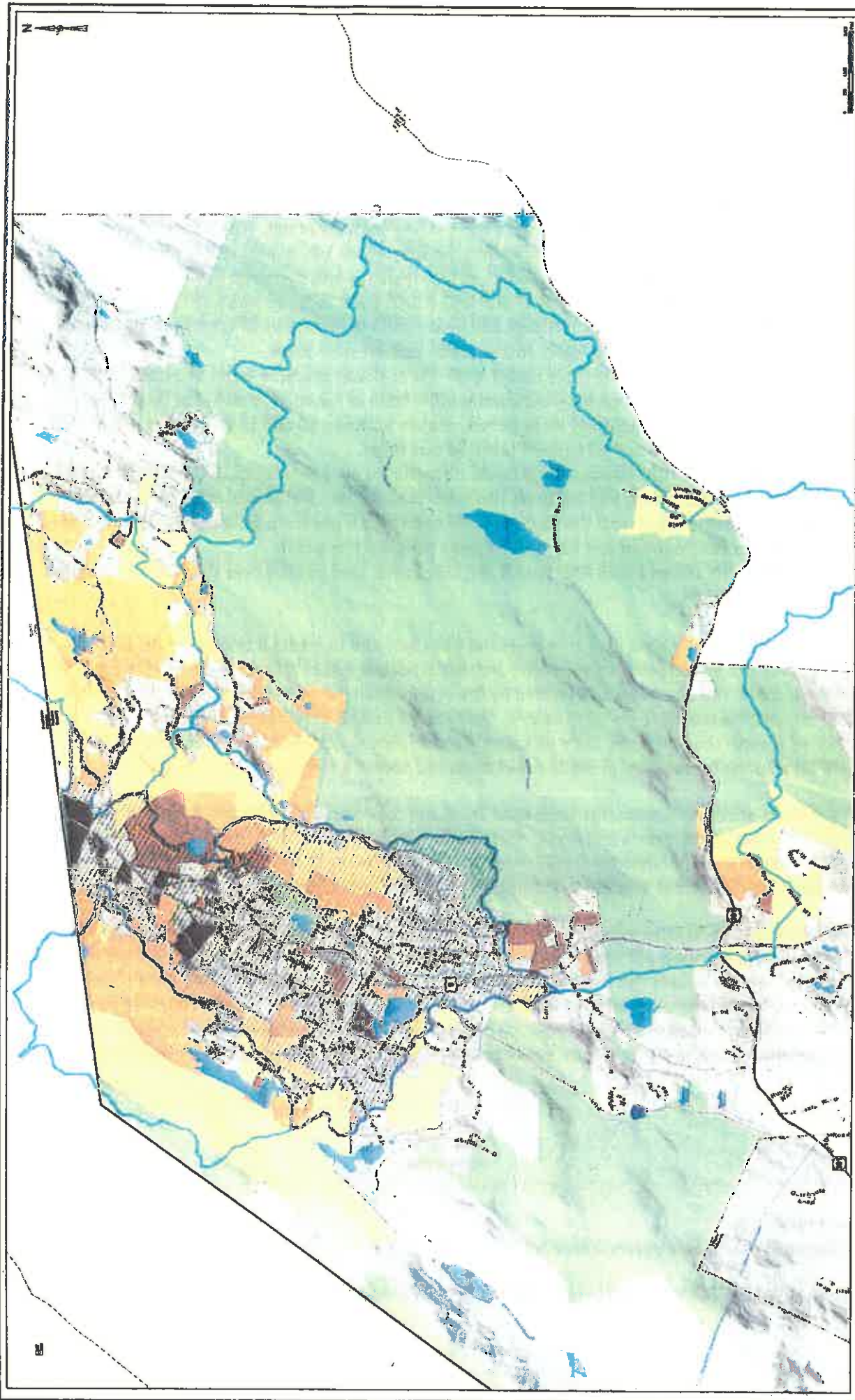


Russell Urban-Mead, P.G.  
Senior Hydrogeologist / VP, Environmental Services

Referenced: Clove Creek Aquifer watershed map, Reservoir Source map, Ranked Parcel spreadsheet  
cc: file



# Exhibit D



County	Delaware
Date	08/20/08
Scale	1 inch = 1,000 feet
Project	W-00000
Page	1

**Delaware Department of Natural Resources Management**

## Parcel Prioritization Clover Creek Aquifer Accumulation Area

Town of Philadelphia - Pottam County, New York

**Clover Creek Aquifer**

Protected Land

Tax Parcels

Clover Creek Aquifer Accumulation Area

Stream Flow

Stream Input

**Prioritization based on Score per Acre**

- Highest Priority
- High Priority
- Moderate Priority
- Lower Priority
- Lowest Priority

**CHAZEN ENGINEERING, LAND SURVEYING & LANDSCAPE ARCHITECTURE CO., P.A.C.**

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 200 West 10th Street  
 Pottam County, NY 12061  
 Phone: (518) 434-3280

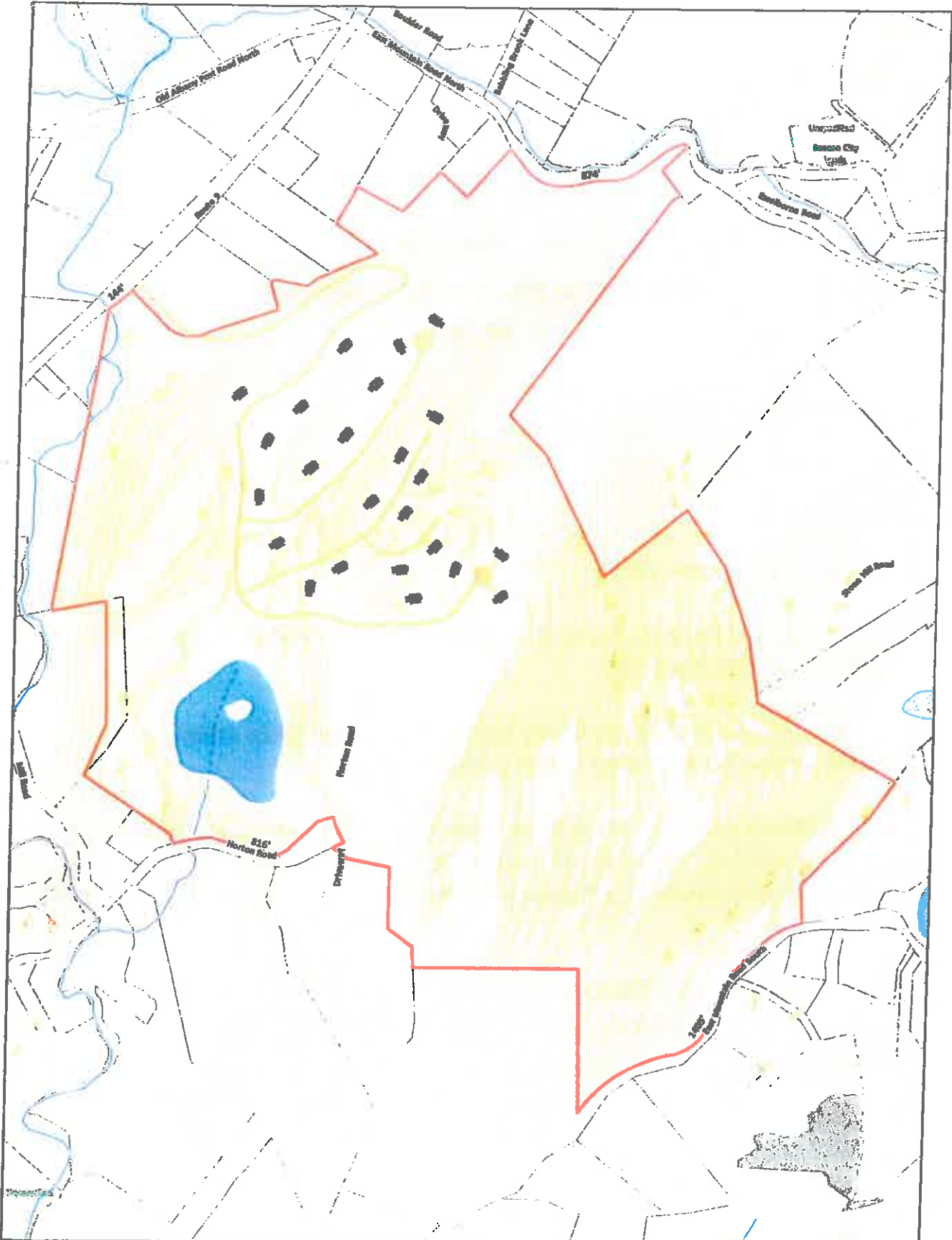
North County Office:  
 270 Bay Road, NW  
 Tuxedo, NY 10986  
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**THE CHAZEN COMPANIES**

Professional Land Surveyors  
 Registered Professional Engineers  
 Registered Professional Architects

100 West 10th Street  
 Pottam County, NY 12061  
 Phone: (518) 434-3280



**Legend**

- Subject Property - 205.43 ±Ac
- Percent Slope >20%
- Subdivision access roads
- Driveways
- Potential Homes
- Adjacent Properties
- Protected Land
- Open Water
- Wetlands
- Perennial Streams
- Intermittent Streams
- Contours (ft)

Credits: Background from ESRI "Terrain Base" map service.

**Concept 2 - Homes shifted to lower slope areas away from lake**

Project Number: 10496

Date: 10/16/2018



Scale: 1" = 400'



This plan is conceptual only and is not represented as an engineered plan.

**Hudson Highlands**  
Phillipstown, NY

**LandVest**



*Harold Lyons & Sons, Inc.*

3175 Route 9

Cold Spring, New York 10516

845-265-2189 -- fax 845-265-2469

PC-59

June 18, 2019

Town of Philipstown  
Planning Board  
P O Box 155  
Cold Spring, New York 10516

Hudson Highland Reserve, Route 9, Horton Road & East Mountain Road North  
Applicant - Horton Road, LLC

I feel the creation of 25 single family homes and an equestrian center at this location would be a true asset to our community.

For over fifteen years, I, and my father before me, have done work for the owners of Horton Road LLC. I have found them to be respectful of the environment and they always went above and beyond plans to beautify and follow all guidelines for safety.

I hope the board grants them the right to build and add value not only to their property, but to Philipstown. This seems like a perfect plan and I am 100% in favor of this project.

Sincerely,



Nathan Lyons

President

Harold Lyons & Sons, Inc.

Cc: Horton Road, LLC

**Subject:** Hudson Highlands Preserve Project

**From:** <msarch@ix.netcom.com>

**Date:** 6/11/2019, 4:54 PM

**To:** amerante@philipstown.com

**CC:** tpercacciolo@philipstown.com

Dear Philipstown Planning Board:

I am writing as a concerned resident of Philipstown, living on East Mountain Road North, regarding the proposed project Hudson Highlands Preserve, off of Route 9, between East Mountain Road North and Horton Road.

Although I have several concerns about this project, I would like to specifically address the traffic patterns associated with vehicular access to the proposed residences and equestrian facility. The plan currently shows access from East Mountain Road North and Horton Road. Although, at one point, access directly off of Route 9 was discussed, it has come to my attention that the DOT has denied access off of route 9 to the development. That leaves East Mountain Road North as one of the entrances, which is already hard to get out of onto Route 9, and is on the school bus route, a potential bottleneck and hazard.

Response

2.90,

2.85

I have also recently learned that a traffic study has not been done yet, which is surprising to me, given the scale of this project, and the dangers that already exist in that area of Route 9. If someone were to travel south on Route 9 to get to their home or horse stable at the Hudson Highlands Preserve, they would need to make a left turn onto East Mountain Road North, where there is currently no turning lane, in a 50 MPH zone. I was the unfortunate victim of a serious car accident at this intersection last year, as I was waiting to make a left turn to go home onto East Mountain Road North. My car was rear ended and totaled by an 18 wheeler tractor trailer going 50 MPH. I suffered trauma and injuries that I am still recovering from, and the police said I am lucky to be alive. The police also mentioned that accidents happen at this spot all the time. (Still fearful, I do not make that left turn anymore, and go further south to Glassbury Court, where there is a turning lane to turn around.)

But the point is not my accident, it's anybody's future accident. I would hope that our community demands a proper traffic study from the developer so that future accidents can be avoided at this intersection. It seems there is an accident every week on Route 9. Turning lanes and reduction of speed limits is essential, especially with the added traffic that Hudson Highlands Preserve will generate. Please let me know if you know of any traffic studies done or if they will be done.

Thank you,  
Madeleine McGinley  
534 East Mountain Road North  
Cold Spring, 10516

JOHN BENJAMIN  
265 Avery Road  
Garrison, New York 10524

Anthony Merante, Chairman  
Philipstown Planning Board  
238 Main Street  
Cold Spring, New York 10516

June 16, 2019

Dear Mr. Merante and Board Members:

RE: Hudson Highlands Reserve(DEIS)

I don't know much about horses, etc., but Rutgers University does. I refer you to their study: Rutgers Equine Science Center document :(www.esc.rutgers.edu/fact\_sheet/horses and manure)

Horses and Manure: Fact Sheet #036- I was astounded to read that the average 1000 pound horse produces 10-12 Tons of manure a year! Do the math: 40 horses!= 400 to 480 TONS of manure per year! I found it also very interesting that the State considers such large commercial equine centers to be Concentrated Animal Feeding Operations(CAFO'S) which are tightly regulated in the hopes of preventing NPK nutrient pollution, as well as vermin and pathogen introduction in to adjacent aquifers, wetlands, ponds and/ or streams.

On the other hand, I do know a great deal about Brook Trout, clean, clear streams and good fishing! Born and raised in Garrison, as kids we fished many of the small brooks, sometimes lucky enough to lure out a little "brookie " or two. As a guide in Colorado, and as a Trout Unlimited member, my knowledge has grown over these 73+ years! I know very well that these trout really are "the canary in the coal mine", the indicator species for a waterways health.

I do know for certain that horse shit and pristine streams do not mix. I know for certain that if such a mix is allowed to occur; the trout will vanish and all we'll have left is a bunch of suckers.

Thank You,

John Benjamin

Response  
3A.8

ANN HAMMOND  
307 E Mountain Rd S. Cold Spring, NY 10516 fensedgefarm@gmail.com

Chairman Anthony Merante  
Town of Philipstown Planning Board  
238 Main St.  
Cold Spring, NY 10516

June 17, 2019

Dear Mr. Merante and Members of the Board,

Re: Hudson Highlands Reserve

I live on East Mountain Rd South, studied Environmental Science and Chemistry for 4 years at SUNY, and have a BA in Biology. I read the DEIS and preceding documents with as much attention as time allowed. I admit that there is much I still do not know, but I have seen enough to be sincerely troubled by the proposed Hudson Highlands Reserve (HHR).

My first concern is that, from the presentation of the project some 5 years ago, it seems to me that the HHR has not significantly responded to the concerns and solutions expressed by the Town of Philipstown, or the expert opinion of the Hudson Valley Land Trust.

Each time the HHR has been given direction or feedback, it only changes the minimum necessary to attain their original plan, which is to more than double the number of houses that it would be able to build in a traditional subdivision.

This fact alone would be sufficient to convince me, should I sit on the Planning Board, to deny the application for a Conservation Subdivision.

Response 2.29 Before a protest is raised that the HHR is actually entitled to 25-29 houses, using the two calculation methods cited, let's all acknowledge that that is a red herring. Expert opinion is that zoning and the land would not actually support more than 10 or 11 houses without a conservation subdivision, and, as pointed out in Ms. Gilbert's 6/12 PCNR letter to the editor,

Response 2.18 neither would 40 horses be supported. This means that the HHR is using a law intended to conserve and protect open space against the town itself while "preserving" land that was already preserved.

Response 3B.52, 3B.34 One could almost accept that were it not that – not content to abuse the spirit of the law – the applicant has refused to make more than the minimum of the modifications suggested by the Hudson Valley Land Trust, the community, and the Town of Philipstown Planning Department. For example, the HHR continues to insist that leaving a proper wildlife corridor or building true clustered housing – as is recommended by sound conservation subdivision planning – wouldn't work for their bottom line. It makes much of leaving a 130 foot buffer between building lots and the pond, which is more than legally required, when the gold standard is 100 METERS, almost 3 times the amount of space proposed by HHR (328 feet.)

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Response 3C.6 The rebuttal to almost all concerns or requests is the repetition that the HHR is preserving 170.8 acres of land with higher conservation value and therefore whatever negative environmental effect generated is acceptable. I disagree. This land was already preserved from development by current regulation. Stubbornly insisting that that is enough value to get away with doing whatever one wants is not a valid argument.

Response 2.18 The HHR does not seem to understand that the Conservation Subdivision is at the discretion of the Philipstown Planning Board, which represents the community of Philipstown, not the developer and its desire for profits.

I understand that there is a flaw in the way the law was written, which allows this kind of dubious action, and that needs to be fixed. In fact, I requested last March that Philipstown enact a moratorium on any future conservation subdivisions until the law has been corrected, and I respectfully request it again today.

Given that this would be the very first conservation subdivision in Philipstown, I think it critical to be cautious in granting such a boon, as we know that it will set a precedent that may be difficult to correct.

The developer speaks about benefits to the community, the environment and the local economy; offering respect and a willingness to understand and accommodate the community, the environment and our hard working representatives would be a solid way to gain standing.

I believe, from a practical standpoint, that granting a conservation subdivision to a developer that has stubbornly refused to respond to reasonable requests and conservation standards would a mistake.

The above is my opinion. Attached are considerations which I do not believe have been satisfactorily addressed by the DEIS; some of them were not even considered.

Respectfully,

  
Ann Hammond

ANN HAMMOND

307 E Mountain Rd S. Cold Spring, NY 10516 fensedgefarm@gmail.com

HUDSON HIGHLANDS RESERVE DEIS/EAF  
OBSERVATIONS & UNANSWERED QUESTIONS

ENVIRONMENTAL SURVEY

- Insufficient study of the environment has been done.
  - Response 3B.36, 3B.42
    - Plant and wildlife surveys were only done in May, June and July. Due to migration and seasonal changes surveys should be made throughout the year.
    - Further, one cannot determine that there are no vernal pools by looking in late spring. Vernal pools by definition are early spring phenomena, and climate data is clear that spring now comes earlier. Stating that "No areas were observed that contained evidence of (i.e. matted and stained leaves, drift lines, etc.), or would support the seasonal presence of vernal pools" and subsequently not taking the time during the following FIVE years to actually verify is unacceptable.
  - Response 3B.14
    - Why haven't any further surveys been taken?
- Response 3B.34
  - Wildlife corridors from conserved lands to water sources have not been protected as per recommendation of Conversation Analysis Report and the Hudson Highlands Land Trust. Houses should not be ringing the pond. Riparian buffer zones should be 100 meters. This is a proposed Conservation Development. Developer should be proposing a state of the art conservation techniques, not the same old gated community.
- Response 3B.53
  - Preservation of bat roosting sites. The argument that bats move from tree to tree on a nightly basis and thus taking down trees in which they may roost will have no effect on bat population makes no sense. If you take down trees, there will be an effect, regardless of whether it is the colony's only roosting site, or one of several.
- Response 3B.7
  - HHR discounts importance of land proposed for development because it was previously disturbed. Every acre of East Mountain is traversed by stone walls; it has all been disturbed. It appears that the last disturbance of the HHR property was 80 years ago. An 80 year old forest may not have the same conservation value of a forest last disturbed 150 years ago, but these are the forests that our wildlife live in today. Discounting the environmental cost of development is misleading.
- Response 3B.67
  - Penetration is a form of fragmentation. Please don't sell it as something different.
- Response 3B.13, 3B-8
  - Conservation findings recommended that invasive barberry and stilt grass be removed but no plan for removal is mentioned in the DEIS. This may seem small but addressing it would be evidence of good faith.
- Response 3B.72
  - Recommendations were made to minimize impact on increasing fragmentation of forest by defining a specified building envelope on each lot, prohibiting the removal of vegetation outside this envelope during construction. I see no evidence of this recommendation being proposed by developer.
  - NYDEC letter dated 10/23/2014 states "If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information." Five years later, I see no evidence of any more recent citations or contact with NYDEC.

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Response  
3B.19,  
3B.32

- Herpetology study suggests that ... old fields, loamy soils, and an abundance of decaying logs may provide habitat for two relatively uncommon species, i.e. eastern hognose snakes, and eastern worm snakes, both listed as special concern in New York. Retaining this habitat within the conservation area would help mitigate the environmental adverse impacts from the proposed subdivision. There is no evidence that this recommendation has been addressed, in fact, I fear that the proposed developed area is precisely the old fields and loamy soils. Am I mistaken?

CULTURAL

Response  
3D.2

- No proposal was made for public access to Ulmar Pond, as suggested in the Conservation Analysis. Instead the development proposes "affordable" dressage lessons at an environmentally unsustainable, and presumably unsustainably expensive equestrian facility. Developer states that no attempt to allow access will be made unless it is granted 25 houses. It seems HHR wants everything and is willing to give essentially nothing. No proposal was made for some type of access in order to even 'sweeten the pot,' except for eventual paid access to the equestrian facility.

Response  
2.7

- Developer emphasizes that residents will be able to enjoy open space and neighborhood walkability. I'm not sure that the intent of the master plan was to provide this to incoming residents by taking open space from the community at large.
- Developer discourses on trend that equestrian developments are the new golf communities. I don't think that that is the type of culture or open space that Philipstown is looking for.

TRAFFIC

Response  
2.87

- Traffic problems have not even been considered.
- 2017 traffic study states that posted speed limit on EMRN is 30. I don't think there is a posted speed limit, but my inquiries last year resulted in a 25 mile an hour speed limit.
- Study of traffic increase was based on 2011 numbers, now 8 years old. These should be updated, as traffic has increased significantly. No discussion of trucks and horse trailers was made. A 50 second wait to find a suitable gap in the traffic stream is laughably short during weekday PM peak hours. Hours of operation seem extremely unlikely. 8-5, especially in the summer, seems unlikely.

Response  
2.90

- The 6/20/18 DOT letter has been available for a year, but the DEIS does not address it. Were the developer operating in good faith, it would have addressed this concern. In fact, the DOT's 6/20/18 determination also notes that it had requested details on the proposed access as far back as 2014, which have not been provided. This lack of openness about the very real roadway issue is a concern.

LAWNS

Response  
2.42

- Lawns are mini environmental disasters. Planning Board asked for limits on clearing/lawn areas, but I see no attempt to limit lawns. Insistence on 25 one acre lots, as opposed to truly clustered housing, is not coherent with a conservation development.



## WATER

- Response 3A.20 • Proposed water usage is unclear and may be misleading. Developer proposes adding 26 wells, claiming an average use of 24,000 GPD will not affect watershed and provides annual watershed data. However, providing annual averages does not illustrate how daily water usage will affect Clove Creek, especially in the summer.
- Response 3A.20,1.1 • Likewise claims about the annual groundwater recharge rate of 65,568,911 gallons per year (or 179,641 GPD) do not clarify the recharge rate and water usage effects on the aquifer in the summer, when water supply is most critical and most in demand. The levels of our creeks and streams are already dropping in June. The water from my mother's well has changed significantly in the last 30 years.
- Response 3A.22 • Dated water information. As mentioned in HHLT letter dated 11/30/17, water data cited is 12 years old. Where is the new data?
- Response 3A.23 • Data on water usage is perplexing, as I believe it is significantly less than US averages. The US national average is 400 gallons per day, and this doesn't include filling pools, watering lawns or gardens. On what assumptions were water usage based?
- Response 3A.24 • This may be nitpicking, but developer claims that the average recharge rate is nearly 9 times the demand, but my math says that it is only roughly 7.5 times the demand. How was this calculated? I'm not qualified to judge if this is a sufficient recharge rate, but the difference between 7.5 and 9 is nearly 20%.
- Response 1.1 • In light of the above, I would like to see clarity on water use assumptions, seasonal water usage and recharge, and a ground water management plan
- Response 2.43 • Developer claims that use of pesticides and fertilizers as well as equestrian use of conserved land would be regulated by HOA, but who will enforce the HOA regulations? It is well known that many homeowners in drought-stricken environments regularly ignore lawn watering bans and that people do whatever they want in their own yards. If each household has a lawn, it seems likely that it will be irrigated, fertilized and have pesticides applied. Who will control that?
- Response 2.74 • "To prevent leaching of horse manure and urine into the watershed, all areas where the horses will be housed, ridden or turned out (stalls, rings, and paddocks) will feature an impenetrable surface designed specifically to prevent horse waste leaching." What does this mean? Water will still fall on that land. It will take horse urine with it. Where will it go? Will it increase storm runoff? How does having 11 impenetrable acres affect the annual recharge rate?

## IMPACTS ON COMMUNITY

Growth Inducing Aspects (P. 149 DEIS)

- Response 2.31 Developer claims that, "As the projected population of the residential homes is relatively small, and MAY not include permanent year-round residents, the demand on commercial services in the Town will be relatively modest."
- I see two issues here. First, thus far, developer has claimed that HOA would guarantee no year round residents, yet plan states that it may include permanent year-round residents. As



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Philipstown has already seen, seasonal developments, such as Trout Brook and Lake Valhalla, do change into year-round developments. The Haldane School District facilities are already burdened, what would the possible addition of 50 more students do to it? (25 houses x 1.9 2017 average children per family in USA.)

I would like to see an exploration of the effect of year-round residency on the school system and other public services and hear commentary from local service providers.

On page 113 of the DEIS

Response  
2.17

"The Applicant has carefully positioned each lot so as to maximize the preservation of open space and protect important cultural and environmental resources. Furthermore, by having a 'community' subsurface sanitary treatment system area, the proposed development is further "clustered." This is a perversion of the concept of clustering.

It's also not clear to me whether -- with the exception of the 130 foot riparian buffer -- any of the conservation value areas on the more developable land are begin conserved.

HOA

Response  
2.60

Discussion of HOA does not explain who will ensure people on horses stay out of protected forests or how conserved land will be protected.

How are the covenants and restrictions in the HOA agreement dictated and enforced?

Response  
2.49

Should an acceptable conservation development eventually be proposed, it should be required that easement holder be an accredited land trust in good standing with the Land Trust Alliance or other reputable organization determined by the Planning Board. Furthermore, the developer must be required to establish a fund *not only* to perpetually finance the inspections by easement holder but also any eventual legal fees required to enforce the conservation.

I took some time to read the 6/1/2017 Full Environmental Assessment Form and a few things jump right out in Part 2.

7. I disagree with the assessment that the proposed action will have no or small impact on species listed as special concern. There are several species of special concern, most notably turtles, and wildlife corridors are being diminished/interrupted. How can there be no or small impact?

13. The claim that there will be no impact on transportation system is absurd. Trailers, trucks, weekenders, events. Are they kidding? Also, who is going to enforce the limitation of the attendees of events to owners, students, and family and friends? HOAs are notoriously weak and often complicit. Is the supervising body (land trust or other) supposed to monitor and enforce? How will that be paid for?

17. Consistency with community plans. *The proposed action may cause a change in density of development that is not supported by existing infrastructure or is distant from existing infrastructure.* How can HHR check off NO? That's exactly what they're asking to do.

**ANN HAMMOND**

307 E Mountain Rd S. Cold Spring, NY 10516 fensedgefarm@gmail.com

I think that it is important for the HHR to remember that it's up to the developer to mitigate the concerns of our Planning Board. It is not the concern of the Planning Board that the developer make a profit. This is Philipstown's first conservation subdivision. It must BE a conservation subdivision to all intents and purposes.

18. Consistency with community character. I do not know why this question was answered with a NO. It is clearly a yes. There are no types of facilities like this one, and no recent developments like this one in Philipstown. It is inconsistent with the zoning. Further, 18b. is almost certainly true; 25 houses, up to 100 people at an event that has terrible road access will eventually affect fire, police, ambulances and schools. 18 E and F are also both true. The proposed action is inconsistent with both the predominant architectural scale and character and the existing natural landscape.

Response  
2.28

In conclusion, the HHR conservation subdivision, years from its original proposal, still does not offer sufficient conservation enhancements to qualify for the additional density. We are still looking at a developer who spent some money on undevelopable land and in exchange for that wishes to build a conventional subdivision with more than double the number of allowable houses and horses, plus a huge and unsustainable equestrian facility.

Response  
2.29

To summarize, there is a multitude of reasons to deny a conservation subdivision to this project.

- Environmentally unsustainable equestrian facility is incoherent with intent of Conservation Development
- Traditional subdivision is incoherent with the intent of Conservation Development
- Demonstrated unwillingness to respect the spirit of the Conservation Subdivision
- Insufficient environmental survey, and questionable presentation of environmental data
- Refusal to provide best practices wildlife corridors
- Refusal to propose true clustered housing
- Developer's troubling lack of attention to the DOT's 2014 request for information, DOT's 6/2018 refusal to grant access to Route 9, and HHR's perpetuation of the fiction that neither East Mountain Rd N nor Horton Rd would be used for access
- Lack of serious consideration of very real effects on traffic that the addition of 25 homes and dozens of autos would affect
- Lack of clarity on water usage and recharge statistics
- Lack of clarity on the potential for year-round residents
- Lack of clarity on impacts on public services
- Lack of clarity on commitment to limit tree cutting to necessary lot envelope
- Lack of clarity on HOA enforcement



**Department of  
Transportation**

**ANDREW M. CUOMO**  
Governor

**MARIE THERESE DOMINGUEZ**  
Acting Commissioner

**LANCE MacMILLAN, P.E.**  
Regional Director

June 7, 2019

Anthony Merante, Chairman  
Town of Philipstown Planning Board  
238 Main Street  
Cold Spring, NY 10516

**Re: NYSDOT SEQRA # 14-0300  
Hudson Highlands Reserve  
Route 9, Town of Philipstown  
Putnam County**

Dear Mr. Merante:

The New York State Department of Transportation (NYSDOT) is in receipt of a Draft Environmental Impact Statement (DEIS) received on May 30, 2019 and dated April 4, 2019.

We note again that there is no mention of traffic in the DEIS and the actual Traffic Impact Analysis and/or NYSDOT comments of August 2, 2018 are not included in the Appendix.

Response  
2.90

Mr. Watson's July 12, 2018 letter states that "The reason that "Traffic" was not included in the draft scoping document is that the question was answered to the satisfaction of the Planning Board during the Conservation Analysis and EAF process." We are glad the Planning Board's concerns were answered, but what about everyone else? This is a Public document, you need to say you looked at it as part of the SEQRA process and state your conclusions. Therefore, under 6 NYCRR Part 617 State Environmental Quality Review (SEQRA), as an Involved Agency, we are unable to endorse the DEIS for this project.

Response  
2.85

We are wondering if the Applicant addressed any of the NYSDOT comments or the request for additional information (i.e. Drainage Report, Site Distance Matrix). I have included past letters and our comment report requesting certain items be addressed. Please address all comments prior to issuance of the Final EIS.

Thank you for your interest in highway safety.

Very truly yours,

Mary McCullough  
SEQRA – HWP Unit  
NYSDOT – Region 8  
4 Burnett Blvd.  
Poughkeepsie, NY 12603

Attachment

cc: Permit Engineer, Residency 8-3  
Lance Gorney P.E., Regional Highway Work Permit Coordinator  
Lee Zimmer, P.E. NYSDOT Traffic & Safety  
Putnam County Planning  
Ulises Liceaga, Horton Road LLC, 315 East 91<sup>st</sup> St., 2<sup>nd</sup> floor, New York, NY 10128  
Glennon Watson, LS, Badey & Watson, 3063 Route 9, Cold Spring, NY 10516

## **McCullough, Mary (DOT)**

---

**From:** Zimmer, Lee (DOT)  
**Sent:** Thursday, August 02, 2018 1:32 PM  
**To:** Glenn Watson  
**Cc:** McCullough, Mary (DOT)  
**Subject:** SEQR # 14-0300 Hudson Highlands Reserve 2018 07 19 Submission Traffic Report  
**Attachments:** 14-300 Traffic Comment Report.doc

Glenn:

I have reviewed the Traffic Study you submitted for the Hudson Highlands Reserve project on July the 19 2018. Please include the SEQR # (14-300) on all correspondence to facilitate document storage and retrieval. I have attached a report of the Departments comments. The most major comment would be the use of the "car" values for sight distance matrix, when on page 13 of the Kimely-Horn report, trucks associated with the equestrian center are the design vehicle for the driveway. It is reasonable to expect this facility to have some truck traffic, therefore the site driveway should be able to handle these vehicles.

Anything else please let me know.

**Lee A. Zimmer P.E.**

Traffic Signals & Highway Work Permits

**New York State Department of Transportation, Hudson Valley**

4 Burnett Boulevard, Poughkeepsie, NY 12603

(845) 437-3320 | [lee.zimmer@dot.ny.gov](mailto:lee.zimmer@dot.ny.gov) | [www.dot.ny.gov](http://www.dot.ny.gov)



**Department of  
Transportation**



**Department of  
Transportation**

**ANDREW M. CUOMO**  
Governor

**MATTHEW J. DRISCOLL**  
Commissioner

**Cathy Calhoun**  
Chief of Staff

**MEMORANDUM**

Final Environmental Impact Statement  
Submission dated July 12<sup>th</sup>, 2018

**Hudson Highland Reserve**

**SEQR # 14-300  
Town of Phillipstown  
Putnam County**

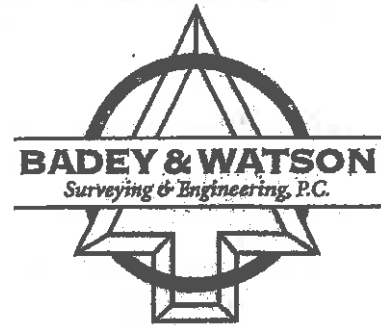
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The following comments result from the review of the project submission dated July 12, 2018.

### **Traffic Study Comments**

1. Please have the applicant submit a PERM33.com with the first section filled out and a remit the permit fee of \$1,400.
2. Please use the ITE 10<sup>th</sup> Generation land use codes for the Trip Generation in the Traffic Study.
3. Will the project have any phases or is this the full build out? Will there be any future increase to the number of stables, if yes will the lead agency direct the applicant to perform a left turn analysis?
4. Are there any new or proposed development in the area that may affect the traffic study?
5. Since trucks are expected to use the site driveway please use either the combination truck or the single unit truck for the sight distance matrix.
6. Please use the design speed not the posted speed limit for the sight distance matrix.
7. Please perform the left turn analysis for the Route 9 southbound left turn into the site.
8. Is the ETC 2021? If so, please state this in the traffic study.
9. Is there any proposed mitigation for this development?

End of report



July 12, 2018

Mary McCullough  
SEQRA /HWP Unit  
New York State Department of Transportation  
4 Burnett Boulevard  
Poughkeepsie, NY 12503

Re: NYSDOT SEQRA #14-300  
Hudson Highlands Reserve  
Route 9, Town of Philipstown  
Putnam County

Dear Ms. McCullough:

This letter is sent in response to your letter to Philipstown Planning Board Chairman Anthony Merante dated June 20, 2018, which was forwarded to us as the project's surveyors and engineers.

The reason that "Traffic" was not included in the draft scoping document is that the question was answered to the satisfaction of the Planning Board during the Conservation Analysis and EAF processes.

I am attaching a copy of the "Traffic Impact Analysis" prepared by John Canning, P.E. of Kimley-Horn of New York, P.C., along with sight line profiles prepared by our office. AKRF reviewed the report on behalf of the Planning Board and recommended that traffic impacts have been adequately addressed.

To the best of my knowledge, there has been no written communication with NYSDOT concerning this project. However, we did meet with Albert R. DeNigro, Permit Engineer, on two occasions early in the planning process. During our initial meeting, Mr. DeNigro advised us that the proposed entry was too close to the guiderail protecting the bridge over Clove Creek. Subsequently, our client purchased adjoining commercial property to the north, which allowed us to relocate the intersection approximately 50 feet further north and further away from the guiderail.

The proposed project does not anticipate regular access to either Horton Road or East Mountain Road North, although it does provide for emergency access routes over existing driveways to both roads. Public opposition aside, and there is more than a little, neither road is suited for the traffic that the project will generate. As the scoping document indicates, in addition to the 25 homes that are being proposed, the plan includes a 40-horse equestrian center, which will require occasional horse trailers, feed deliveries, manure removal and other service vehicles as well as the additional automobile traffic that it will generate. All of this, of course, was considered during the preparation of Mr. Canning's report.


[www.Badey-Watson.com](http://www.Badey-Watson.com)

Horton Road is a dead-end street that is about 3,000 feet long. Most of it is a narrow dirt road. There is a particularly sharp horizontal angle in the road that is at the precipice of a sudden grade change from relatively level to -11%, then quickly to -19%, and then almost immediately crosses a bridge that we believe is inadequate. Mill Road connects to Horton Road avoiding the bridge, but it is also very steep and has a difficult horizontal geometry.

East Mountain Road North is a narrow road that runs along a protected creek. While the road is relatively straight and gentle there is insufficient room to make it suitable for the equestrian related traffic and the disturbance that would be required to construct the intersection and roadway into the project would require significant disturbance and blasting, which we do not anticipate will be required at the Route 9 entry point.

We trust that the information in this letter and its attachments is adequate for your review. If it is not, or if you have any questions, please do not hesitate to contact me. If the Department continues to have concerns regarding the provision of access from US Route 9, please advise when we may meet with you to discuss. Thank you for your attention and concern.

Yours truly,  
**BADEY & WATSON,**  
*Surveying & Engineering, P.C.*

  
by  
Glennon J. Watson, L.S.  
845.265.9217 x14  
[gwatson@badey-watson.com](mailto:gwatson@badey-watson.com)

GJW/bms  
Cc: File U:\86-228B\WO\_21792\_Hudson Highlands Reserve\SEQRA\Responses\MM27\N18BP\_Response\_to\_DOT.docx  
Ulises Liceaga, HHR  
Stephen M. Gross  
Richard L. O'Rourke, Esquire  
John Canning, P.E.







**Department of  
Transportation**

**ANDREW M. CUOMO**  
Governor

**PAUL A. KARAS**  
Acting Commissioner

**LANCE MacMILLAN, P.E.**  
Acting Regional Director

June 20, 2018

Anthony Merante, Chairman  
Town of Philipstown Planning Board  
238 Main Street  
Cold Spring, NY 10516

**Re: NYSDOT SEQRA # 14-0300  
Hudson Highlands Reserve  
Route 9, Town of Philipstown  
Orange County**

Dear Mr. Merante:

The New York State Department of Transportation (NYSDOT) is in receipt of a submittal dated June 6, 2018 and received on June 14, 2018. The submittal contains a Positive Declaration, a Resolution adopting the Positive Declaration, a Full Environmental Assessment form and a Draft Scope for the DEIS.

We note that the draft scoping document does not contain anything regarding proposed traffic impacts and mitigation. In 2014, we requested details of your proposed access to Route 9, showing exact location to the existing bridge and guiderail. To date, we still have not received them. A Traffic Impact Study, Drainage Report and sight distance matrix were also requested. To date, we have not received any of them.

*As per Section 5A.4 of the Policy & Standards - When a property fronting on a State highway also fronts on and has access to any other public street, road, or highway that intersects the State highway, the Department may restrict access to the State highway if it determines that such access would be detrimental to the safety and/or operation of the State highway.*

Based upon the limited information submitted to date, and having multiple access points from both Horton Road and East Mountain Road North, direct access onto Route 9 is not necessary.

Thank you for your interest in highway safety.

Very truly yours,

Mary McCullough  
HWP/SEQR Unit

cc: Permit Field Engineer, Residency 8-3  
Putnam County Planning

NYS DOT SEQ# 14-0300

PLANNING BOARD  
TOWN OF PHILIPSTOWN; PUTNAM COUNTY

In the matter of the application of

Horton Road LLC Conservation Subdivision  
NYS Route 9

RESPONSE TO REQUEST THAT TOWN OF PHILIPSTOWN PLANNING BOARD SERVE  
AS LEAD AGENCY

On behalf of the New York State Department of Transportation - Region 8,

I acknowledge receipt of the Lead Agency notice in this matter, which was mailed on  
January 18, 2017.

The above-named involved agency hereby

(Please check one)

CONSENTS that the Town of Philipstown Planning Board serve as Lead Agency  
in this application and requests that the undersigned continue to be notified on  
filings and hearings in this matter.

DOES NOT CONSENT to the Town of Philipstown Planning Board serving as  
Lead Agency in this application and wishes that the New York State Department  
of Transportation - Region 8 serve as Lead Agency. To contest Lead Agency  
designation, the undersigned intends to follow the procedures outlined in  
6 NYCRR 617.6 (b)(5).

DATED: 2/22/2017

SIGNATURE: [Handwritten Signature]

NOTE => ENCLOSED PLEASE FIND OUR EARLIER  
COMMENTS REGARDING THIS PROPOSAL.



State of New York  
Department of Transportation  
Region Eight  
4 Burnett Boulevard  
Poughkeepsie, New York 12603  
[www.nysdot.gov](http://www.nysdot.gov)

William J. Gorton, P.E.  
Regional Director

Joan McDonald  
Commissioner

December 31, 2014

Mr. Ande Merante, Chairman  
Town of Phillipstown Planning Board  
238 Main Street  
P.O. Box 155  
Cold Spring, New York 10516

Re: **NYS DOT SEQRA# 14-0300**  
**Hudson Highlands Reserve**  
**Town of Phillipstown, Putnam County**

Dear Mr. Merante:

We have received Site Plan, Full Environmental Assessment Form and Lead Agency designation request dated November 18, 2014, received on November 20, 2014. We consent to the Town of Phillipstown Planning Board assuming the role of Lead Agency for review of the referenced proposal.

The proposed action involves development of 28 detached single family homes along with an equestrian center for the community. We have completed our review and have the following comments to offer:


- This Department does not allow more than one access to highway system for minor residential developments. However, considering weight/truck restrictions on East Mountain Road North and limited use of Horton Road, we would allow access to Route 9.
- We would like to point out that the proposed access to Route 9 is very close to the existing guide rail and bridge. We want the applicant to provide design details for the access to Route 9, showing exact location in reference to the bridge and guide rail.
- We also want the applicant to explore the possibility of improving East Mountain Road North rather than seeking access to Route 9. It may be economically most viable option.
- A sight distance matrix along with travelling speed must be shown on the map for our review.
- A drainage study must be prepared and submitted for our review and comments.
- A Traffic Impact Study must be prepared for any equestrian events planned at this location.

We suggest that the applicant address all the above mentioned concerns and resubmit the proposal for our review and comments.

We would also like to inform you that the proposed configuration of access driveway and any additional work within the NYS DOT Right-of-Way requires a Highway Work Permit (HWP). Depending upon the size of the proposed improvement or impact to the NYS DOT Right-of-Way, additional engineering details may be required. The applicant should also be encouraged to review the permit process and all required HWP forms on the NYS DOT website (<https://www.dot.ny.gov/index>).

Thank you for your interest in highway safety.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Akhter A. Shareef', written over a horizontal line.

Akhter A. Shareef  
Senior Transportation Analyst

cc: Michael Sassi, Traffic Engineering and Safety Group, Region 8  
Rock DeNigro, Permit Field Engineer, Residency 8-3



State of New York  
Department of Transportation  
Region Eight  
4 Burnett Boulevard  
Poughkeepsie, New York 12603  
[www.nysdot.gov](http://www.nysdot.gov)

William J. Gorton, P.E.  
Regional Director

Joan McDonald  
Commissioner

December 31, 2014

Mr. Ande Merante, Chairman  
Town of Phillipstown Planning Board  
238 Main Street  
P.O. Box 155  
Cold Spring, New York 10516

**Re: NYSDOT SEQRA# 14-0300  
Hudson Highlands Reserve  
Town of Phillipstown, Putnam County**

Dear Mr. Merante:

We have received Site Plan, Full Environmental Assessment Form and Lead Agency designation request dated November 18, 2014, received on November 20, 2014. We consent to the Town of Phillipstown Planning Board assuming the role of Lead Agency for review of the referenced proposal.

The proposed action involves development of 28 detached single family homes along with an equestrian center for the community. We have completed our review and have the following comments to offer:

- This Department does not allow more than one access to highway system for minor residential developments. However, considering weight/truck restrictions on East Mountain Road North and limited use of Horton Road, we would allow access to Route 9.
- We would like to point out that the proposed access to Route 9 is very close to the existing guide rail and bridge. We want the applicant to provide design details for the access to Route 9, showing exact location in reference to the bridge and guide rail.
- We also want the applicant to explore the possibility of improving East Mountain Road North rather than seeking access to Route 9. It may be economically most viable option.
- A sight distance matrix along with travelling speed must be shown on the map for our review.
- A drainage study must be prepared and submitted for our review and comments.
- A Traffic Impact Study must be prepared for any equestrian events planned at this location.

We suggest that the applicant address all the above mentioned concerns and resubmit the proposal for our review and comments.

We would also like to inform you that the proposed configuration of access driveway and any additional work within the NYSDOT Right-of-Way requires a Highway Work Permit (HWP). Depending upon the size of the proposed improvement or impact to the NYSDOT Right-of-Way, additional engineering details may be required. The applicant should also be encouraged to review the permit process and all required HWP forms on the NYSDOT website (<https://www.dot.ny.gov/index>).

Thank you for your interest in highway safety.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Akhter A. Shareef', with a long horizontal flourish extending to the right.

**Akhter A. Shareef**  
**Senior Transportation Analyst**

**cc: Michael Sassi, Traffic Engineering and Safety Group, Region 8**  
**Rock DeNigro, Permit Field Engineer, Residency 8-3**



**PHILIPSTOWN PLANNING BOARD  
MEETING MINUTES  
June 20, 2019**

The Philipstown Planning Board held its regular monthly meeting on Thursday, June 20, 2019 at the Old VFW Hall, 34 Kemble Ave., Cold Spring, New York.

Present: Anthony Merante, Chairman  
Kim Conner  
Neal Tomann  
Peter Lewis  
David Hardy  
Neal Zuckerman  
Dennis Gagnon  
Ronald Gainer, Town Engineer  
Stephen Gaba, Counsel  
Aaron Werner, AKRF

Chairman Merante opened the meeting at 7:30 p.m. with the Pledge of Allegiance. Roll call was taken by Ms. Percacciolo.

**A. Minutes**

The minutes of the May 16, 2019 Regular Monthly Meeting were reviewed.

Ms. Conner moved to adopt the minutes of May 16, 2019 and Mr. Hardy seconded the motion. The vote was as follows:

Anthony Merante	-	Aye
Kim Conner	-	Aye
Dennis Gagnon	-	Aye
Peter Lewis	-	Aye
Neal Tomann	-	Aye
Neal Zuckerman	-	Aye
David Hardy	-	Aye

**B. Return of Escrow**

**Miranda L. Grimm-Juby, Trustee, 977 East Mountain Road South  
TM# 18.-2-11.2, 18.-2-9.1, 18.-2-9.2**

Mr. Gaba reported there is one outstanding charge that needs to be remedied but suggested the board approve the return of escrow conditioned on the payment of such.

Ms. Conner moved to return the escrow of Miranda L. Grimm Juby pending the payment of the outstanding charge and Mr. Tomann seconded the motion. The vote was as follows:



Anthony Merante	-	Aye
Kim Conner	-	Aye
Dennis Gagnon	-	Aye
Peter Lewis	-	Aye
Neal Tomann	-	Aye
Neal Zuckerman	-	Aye
David Hardy	-	Aye

### **C. Public Hearing**

#### **Hudson Highland Reserve, Route 9 & Horton Road**

At the start of the discussion it was noted that the applicant had a representative on site to take a stenographic record of all discussions, which would be made available for the Town's records.

Chairman Merante read an abbreviated version of the public hearing notice.

Chairman Merante stated that on May 16<sup>th</sup> the Planning Board determined that the Draft Environmental Impact Statement was complete for public review and comment. It examines the nature and extent of identified potential environmental impacts as well as steps which could be taken to minimize or avoid adverse impacts. Written comments will be accepted until July 8<sup>th</sup> and should be addressed to the Planning Board. The Chairman explained that the board chose to extend this period beyond the minimum 10 days after the close of the Public Hearing. He requested that anyone who wishes to speak at this public hearing sign in with their name, address and any affiliations. He stated they would first give the project sponsor 5 minutes to give a brief description of the project. Chairman Merante made it clear, this is not a question and answer period, and all comments should be directed to the Planning Board. Comments should be limited to 2 minutes and should be limited to the DEIS. He noted that the meeting is being filmed and all comments will be recorded by a stenographer. It was requested that when it is your turn to speak you approach the microphone and identify yourself. Chairman Merante then asked if any of the board members had any brief comments.

Neal Zuckerman stated he had a couple of points to make and they are directed to the members of the public. He stated that as a Planning Board member he draws on 5 areas of input to ultimately vote: the applicant's word, the code, the board's experts, his own experience and judgement and the input of the public. He stated the public has had some input but most of the airtime has been confined to the first 4 areas he noted. He stated that from all of those inputs he arrived at and voted for a positive declaration of environmental impact with 3 explicit concerns supporting his vote which he has expressed numerous times. Mr. Zuckerman explained that last month when the board accepted the DEIS, which does not mean the Board's agreement with all statements in the DEIS, he again stated those same concerns about this project's environmental impact and was validated with the project's representatives that no changes were offered in this submission that addressed his concerns. He stated that public input on this project is critical and asked that the public be objective and respectful in conveying their perspective. Mr. Zuckerman informed the board as well as the public that he would have to leave the meeting by 9:45 pm.

As no other board members wished to make comments at this time, the Chairman turned the floor over to the applicant's team to give a brief description of the project.

Richard O'Rourke, attorney with the law firm Keane & Beane PC representing the property owner and the chief architect on the project, Ulises Liceaga, stated he would keep his comments brief as this meeting's concept is to hear from the public with respect to comments and questions that they have regarding the document which is the consideration of tonight's meeting. Mr. O'Rourke stated the books that are considerable are present and have been available to the public for some time and shall remain available to the public. He stated a great deal of study has gone into this and has been done with respect to this property, all of which is necessary when proposing a project that is setting aside so much open space and attempting to develop a quality subdivision and equestrian center. Mr. O'Rourke explained the proposal is for there to be a community of what could be termed 'green homes' which means that the homes shall be built to the highest standards in terms of environmental sensitivity and to complement the natural landscape, all to be developed alongside a carefully planned state-of-the-art equestrian facility. He stated the homes are not limited only to owners who intend to board horses at the equestrian facility but are targeted for those that envision using this property for seasonal use and of like-minded residents who intend to encourage and maintain ecological value of this property. Mr. O'Rourke explained the remaining 159.8 acres are to be left untouched and preserved as open space by legal instruments that will keep it as undisturbed open space in perpetuity. According to the conservation analysis previously prepared, the land intended for the preservation is of high ecological and conservation value and will be protected and will maintain the natural integrity for native species that inhabit the land. He continued, because there are some misunderstandings and misconceptions as to what is proposed, including the access points, the proposed development, and the resulting impacts, their consultants will provide a very brief review of precisely what is proposed, what the project benefits are, and why they believe this project is not only good for the community but also for the environment. Mr. O'Rourke stated they are creating opportunities for recreation in a quality development and the analysis that has been undertaken provides a framework of protection and quality development that will ultimately benefit the community on a much larger scale. He apologized because the format of the public hearing and the regulations of SEQRA do not allow questions to be answered this evening, and that by law the questions will be answered in writing as part of the process. He stated they will be responsive in accordance with the law which will require the questions posed this evening to be answered in writing in what is called the Final Environmental Impact Statement. Mr. O'Rourke introduced Steve Gross, the applicant's consulting planner, to give a quick run-through of their proposal.

Steve Gross, principal of Hudson Highlands Environmental Consulting, stated he would give a quick orientation for anyone who might not be as familiar with the project. He stated this is a conservation subdivision which means it's a design that takes into account the environmental constraints and the environmental benefits or features of the property to come up with a design. They started with a conservation analysis that looked at all of the natural resources that were on the property along with the constraints and mapped them out. The map was displayed and showed the darkest reddish areas to be of high conservation value, the yellow shows areas of medium conservation value, and the blue shows the lowest conservation value or potential development area. Some factors that are considered when deeming the conservation value of a piece of land include wetlands and watercourses, native vegetation, and steep slopes. Mr. Gross

pointed out a historic road that runs through part of the property and some existing structures as well as an area that had been subject to some previous occupation and development. He stated the flattest areas of the site are located in the blue area and pointed out other areas where steep slopes exist. Mr. Gross explained the development was planned to avoid the constraints, avoid the steep slopes and preserve the most highly beneficial parts of the property, the most ecologically sensitive parts, especially the wetlands, wetlands buffer, the pond, native areas, native vegetation & high value habitat. He stated they have a lot of invasive species in the area that had been previously subject to development, so the development was clustered into these areas.

At this time, the Chairman stated they would begin hearing public comment, going down the sign-in sheet name by name.

**Lynda Ann Ewen, Glassbury Court** – Ms. Ewen stated she is present representing only herself but stated she is Vice-Chair of the Philipstown Aging at Home Organization and is a member of Glassbury Court, which is a neighbor of this development. Ms. Ewen stated she was looking for clarification as all of this has been very confusing. She stated Michelle Smith wrote a wonderful article in the paper and thanked her for doing so. She suggested anyone who has not yet read it take a look. Ms. Ewen stated the applicant is applying for a conservation subdivision which means a conservator, an organization that says ‘you’ve played by the rules and we will make sure you continue to keep playing’. She stated it is her understanding that the Hudson Highlands Land Trust did not accept the proposal as it was given, which means they have serious questions about whether this is indeed a conservation subdivision. Ms. Ewen then stated that 40 horses is a lot of horses and according to the zoning regulations of the Town of Philipstown each horse requires an acre. She questioned if there is 40 acres set aside for the 40 horses. She stated those were her 2 main concerns.

Chairman Merante asked that the audience not applaud after every speaker as there are a lot of people who wish to speak tonight and the board would like to keep the meeting moving.

**Nat Prentice, Garrison resident** – Mr. Prentice explained he was in attendance to remind the board of the relevance of the Comprehensive Plan to this particular proceeding. He stated he is the coordinator of the town’s Comprehensive Plan Update Committee and was also a member of the special board that wrote the existing plan. He reminded the board the plan is a statement of community goals and sets out a conceptual roadmap as to how to achieve them. Mr. Prentice explained it is not the law but in fact does provide a backbone to the law in very concise and ambiguous language. When the law, in this case the open development zoning law, becomes subject to a variety of interpretations, as it has in this application, he believes there is an opportunity to go back to the Comprehensive Plan and see what it says about open space development, particularly, when this law is being interpreted for the very first time in the history of the town. Mr. Prentice read Chapter 3, Section R 2.4 of the Comprehensive Plan which states: “Allow open space (cluster) development, with safeguards to ensure that such developments do not lead to more development than would otherwise occur and that they preserve open space that the Town wishes to protect.” He repeated, “with safeguards to ensure that such developments do not lead to more development than would otherwise occur” and explained that he does not understand as much about this application as the board does but his interpretation is that because

they are in the Open Space Overlay, if the applicant was applying for a conventional subdivision they would only have the opportunity to build 10 houses. This plan calls for 25 houses and a commercial equestrian center capable of housing 40 horses.

**Susan Anspach, 516 East Mountain Rd S** – Ms. Anspach explained that having attended most of the public hearings held on this proposal she has seen a number of recommendations that would permit development but on a scale that's consistent with the limits of the site. However, this developer seems to think that by utilizing a conservation subdivision designation, which sets aside 159.8 of the 210 acres as undisturbed open space, he can develop however he wants, even if it's inconsistent with the character of the community or the intent of the regulations enabling such subdivisions. Accordingly, none of the suggestions from the public were accepted into the DEIS and thus no changes were made to the initial proposal. As you've heard previously or read in written submissions, there are many concerns that should stand in the way of this project going forward as is. However, at this late date what is even more revealing about the intentions of this developer is his duplicity in addressing the required traffic study for this project. She continued, when neighbors objected to access being on the windy and narrow roads of Horton Street and East Mountain Road North the developer was quick to claim that those roads would only be in cases of emergency and access to the project would be directly from route 9. Apparently, since 2014 the NYS DOT has been asking for details regarding this proposed Route 9 access. After the 2018 Scoping sessions the DOT raised a number of issues; to date those DOT concerns have not been addressed. Ms. Anspach quoted the June 7, 2019 letter from DOT stating "Therefore, under 6 NYCRR Part 617 State Environmental Quality Review (SEQR), as an Involved Agency, we are unable to endorse the DEIS for this project." She concluded, since this is Philipstown's first conservation subdivision, we need to get it right.

**Glenn Lowry, 130 Horton Rd** – Mr. Lowry explained that he and his wife are direct neighbors to this development. He stated they are not against development and actually believe an intelligent and sound land management program that includes housing and potentially a stable is viable. What they are deeply concerned about is the scale of the equestrian center. He requested everyone draw their attention to the idea of a 40-horse barn with all the attendant outbuildings, parking, circulation, waste removal, in the middle of what is already a beautiful environment that's about to be further protected with an easement. He equated it to putting a factory or gravel-pit on Main Street; the scale makes no sense. Mr. Lowry stated he is deeply concerned that this will have a negative impact not just on our immediate environment but on Clove Creek and the nature and natural habitats that are there. He urged the board to go and walk that land and imagine what all of that waste removal will look like, how it's going to function, and the scale of the barn and horses involved.

**Irvine Flinn, Garrison** – Mr. Flinn stated he was in attendance this evening particularly because the previous day our state legislature enacted the Climate Leadership & Community Protection Act which the governor has now signed into law. He stated there is scientific consensus that continued emissions of carbon dioxide, methane and other greenhouse gases caused by human intervention in the natural order will result in catastrophic climate change. The new law sets our state's goal at net zero for such emissions by the year 2050. Mr. Flinn stated we are here this evening to consider the environmental impacts of a proposal to build 25 houses on what is essentially undeveloped forest land abutting a pond and fishing stream. This project is not

designed to provide needed affordable housing for full-time residents of our community. Mr. Flinn suggested it is designed to attract apparently well-to-do New York City families seeking second homes, many of whom will likely drive back and forth on the 50+ miles each way in cars emitting exhaust from gasoline engines and when they're here they won't be walking across the street to Foodtown for their groceries. There will be 25 additional gas emitting cars driving into town seeking space in the Foodtown parking lot. He suggested their city homes will likely remain heated while their new second homes up here will be heated with oil, propane, or maybe electric heat pumps hopefully. If it is heat pumps, where will they get their cleanly generated electricity? Mr. Flinn stated there is nothing in the site plan indicating a solar array.

**Jocelyn Apicello, Garrison** – Ms. Apicello explained that she runs a farm in Garrison and has a small nonprofit called The Ecological Citizens Project and is a volunteer on the Climate Smart Communities Task Force. She explained the precedent that could be set here by allowing a “conservation subdivision” has really compelled her to make her voice heard tonight as a professor of public health who considers housing and land-use decisions as paramount to the public's health and particularly to the health inequities we find in our society today but also as a resident of Philipstown who is proud of this place and really encourages all of us to continue to be a positive model for a healthy ecologically conscious lifestyle up here in New York State. She continued, the truth is this region of the state is poised to take in an increasing population as a result of predicted climate change displacement patterns. She encouraged all to brace ourselves for this by continuing to conserve land and develop smartly; that is to protect important forests and wetland areas that are known carbon sinks and will do more to pull carbon out of our atmosphere than we ever realized, and to discourage the development of single family, detached homes on larger plots that cut off nature from other humans and wildlife, especially in open spaces that are deemed conservation subdivisions. Ms. Apicello stated a recent New York Times article just published reported that in most cities across this country it is illegal to build anything other than single family detached housing in roughly 75% of all land. This trend in detached, large scale, single family housing developments are a result of local zoning laws. The economic and racial segregation that persists in towns and cities across this country is not only a result of federal and private bank lending policies but a result of local zoning and planning decisions. She urged the board to use their power to really make this conservation subdivision be what it's worth.

**D.J. Baker, Garrison** – Mr. Baker stated he and his wife are longtime residents of Garrison. He and his wife support the right of private property owners to develop their property but only in accordance with applicable rules and regulations. He believes that the filing by Hudson Highlands Land Trust is a superb commentary on issues that have been raised by Hudson Highlands Reserve and commend the points they raised to the Planning Board. Mr. Baker stated these are not easy issues or simple questions. There has to be balance between the rights of the property owner against the welfare of the community, of water, of wildlife habitat and of vegetation. He believes it can be done but it will take a lot of thought and effort and compromise by the proposed developer. He stated it will be critically important as to who holds the conservation easement, how the community monitors compliance and what the enforcement remedies are. Mr. Baker stated they have a lot of confidence in the Planning Board and believe they can get it right. He stated this developer has the talent, ability and resources to work with the board to get it right.

**Heidi Wendel** – Ms. Wendel stated she is new to the area and wanted to express her view as a newcomer. She stated she moved here for the hiking and the beauty of this area which is so famous historically. She moved from 114<sup>th</sup> Street in New York City and believes this area is well known for its unbelievable beauty and hiking opportunities. To call this a conservation subdivision is extremely unfair to the new generation of hikers and nature lovers and sends the wrong message to people like her 28-year-old daughter and her boyfriend who love this area for its beauty and historic properties. Ms. Wendel stated in addition to being extremely important to have the first conservation subdivision truly be a conservation subdivision with the qualities that Michelle Smith discussed in her perspective in the PCNR, it's also important to remember that ultimately it will greatly reduce housing prices and the value of properties in this area.

**Celia Imrey, 62 Horton Rd** – Ms. Imrey reported she lives at 62 Horton Road and has been there for 18 years. She stated she would like to understand whether or not it's possible to have a proper set of accountability and responsibility for any type of environmental project going forward in Philipstown. The reason she asks is that Glassbury Court was put into her neighborhood in 2009 with a lot of opposition from that area. The neighbors collected together to oppose it and it was put in as a conservation. However, when she first got to her home in 2001, she could not even step into Clove Creek without being nibbled by trout. There were turtles everywhere and bats in the sky at night. There were so many night noises that she would be woken up and is sad to report that the natural habitat at her home has depleted greatly in the last 18 years, right across from that development. Ms. Imrey stated she has been calling the DEC to ask if someone can come and make a report. She stated she has gotten a permit to restock her stream with trout because she is so disturbed at how few there are. She requested the Planning Board do a follow-up report for Glassbury Court on the environmental impact that it's had on that area already. She stated she is really worried about this project for the same reasons. She urged the board to consider a rigorous accountability for any proposal for the properties.

**Krystal Ford, Garrison Woods Rd** – Ms. Ford stated she is concerned about a couple of things, one of them being water quality. She questioned how up to date the flood zone maps are. She explained that as we have a warming world, we're going to be wetter. She's concerned about the horse waste and septic systems overflowing and questioned how they will make sure the waste doesn't end up in Clove Creek. She questioned how pesticide and fertilizer use is going to be strictly monitored. She also questioned how the horses will impact the wildlife in the area and if wildlife will be scared off.

**Madeleine McGinley, East Mountain Rd N** – Ms. McGinley reported she has been living on East Mountain Rd N for 16 years. She stated she would like to focus on the traffic issues associated with access to the site. She requested clarification on exactly where the main access point will be and if it has gotten approval from NYS DOT. She questioned if a traffic study has been submitted to the DOT. Ms. McGinley explained she speaks for many of her neighbors, current and future neighbors, for whom safety is a priority when questioning about the traffic study. She stated she also speaks for the safety of any potential future neighbors who might live at the proposed Hudson Highlands Reserve. She explained she also speaks as a victim of a very serious car accident at the intersection of Route 9 & East Mountain Rd N, which is currently shown as a proposed access point to the site. She explained that last summer she was waiting on

the southbound side of Route 9 to make the left turn to go home on to East Mountain Rd N when her car was rear-ended and totaled by an 18-wheeler tractor-trailer going over 50 miles an hour and was spun into oncoming traffic. Ms. McGinley stated she suffered trauma and serious injuries and the police explained she was lucky to be alive. She stated the police also mentioned that accidents happen at that spot all the time. Ms. McGinley stated the point is not her accident but the safety of everyone who travels up and down Route 9. She expressed her hope that the Planning Board demand the submittal of a thorough traffic study for review by the DOT and that the applicant would provide mitigation given the additional traffic that the proposed project would generate. She suggested solutions such as a turning lane, flashing lights, or a reduction of the speed limit along that section of Route 9 need to be looked at. She requested the board address 2 letters received from DOT. In the first letter, dated June 20, 2018, the DOT deemed the direct access off Route 9 to the development as not necessary because there are access points on East Mountain Rd N and Horton Road. She stated it is already hard to get in and out of those 2 roads and added traffic and horse trailers would worsen the bottleneck and increase hazards on a road which is already part of the Haldane school bus route.

**Michelle Smith, Hudson Highlands Land Trust** – Ms. Smith stated that 2 days prior the Land Trust submitted a 25-page report with their comments on the DEIS but these 2 minutes would not allow the time to go through all of that. To summarize, she stated their 3 main concerns have to do with wildlife, the definition of open space that's conserved, and the Homeowners Association and equestrian facility management and their environmental impacts. Regarding wildlife, she reported they hired their own experts and believe there are shortcomings in the wildlife studies that need to be remedied. The Trust also believes that there is not sufficient mitigation of impacts on New York species of special concern, those are species that have been declining in population across the state. Ms. Smith stated, on the definition of open space and consistency with the zoning code, you will see that the conserved open space is actually split into 2 different segments that are disconnected; they're not contiguous. They cut off a wildlife corridor and constrict another corridor. Ms. Smith also added that the conserved open space includes the 11-acre equestrian facility which is fully developed and therefore doesn't really have any residual conservation value and therefore the Land Trust does not think it should be included in the conserved open space. Finally, she stated we can not underestimate the impact that the Homeowners Association and the equestrian facility management have on the future environmental impacts. The governance of those organizations will drive what happens with water, with Clove Creek, with the Clove Creek Aquifer and if anything goes wrong with them, if they get into financial difficulty or have problems in their governance, that will have an adverse impact on the environmental impacts of this project; there needs to be mitigation for that. Lastly, Ms. Smith expressed their concern about the loss of biodiversity locally and globally. She stated this is a difficult task and they want this project to work and the Planning Board is on the front lines of ensuring the future of biodiversity in Philipstown and hopes the board will take this information very seriously.

**Scott Silver, Constitution Marsh Audubon Sanctuary & Visitor Center** – Mr. Silver reported he is the new director of the Constitution Marsh Audubon Sanctuary and Visitor Center and thanked the board for the opportunity to speak. He questioned what safeguards are in place for eliminating or minimizing any impact of equestrian trail riding within the center once everything is built and there are 40 horses on the land, generating approximately one ton of manure and

urine a day. He suggested the impact on the surrounding areas will also be very great. Mr. Silver commended the board for the open space zoning law and asked that they respect the spirit of the law as well as the letter of the law when making their decisions. He stated they are very concerned with the loss of biodiversity as well. Mr. Silver stated he understands that it's always a one-way street; we make these mistakes and then we don't have a change to go back and do it again. He requested and expects that the board would be diligent in their decision making.

**Hank Osborn** – Mr. Osborn distributed a copy of a viewshed analysis to the members of the board. He reported he works for the New York/New Jersey Trail conference and they work to protect trails from erosion, overuse, improper use and various other threats. He posed the question, have you ever been to the top of a mountain and seen a beautiful view? A beautiful view that featured a single blemish in the middle of nature? He stated the Hudson Highlands Reserve project site is directly east of one of the most popular parks in the state, the Hudson Highlands State Park. The park includes the number one most popular day hike in North America, Breakneck Ridge. From the top of the ridge there's an amazing view to the east, over rolling hills, over all of Fahnestock park, there's nothing but green hills as far as you can see. There is some development along the Route 9 corridor but it is all concentrated right along the road. All the hillsides above are completely undisturbed. The view is spectacular; you cannot tell where Fahnestock Park begins or ends. He reported the proposed development would be seen from that viewpoint and every other viewpoint along the Fishkill Ridge and Scofield Ridge. There is a total of 11 viewpoints, all of them look directly east across the green hills; the proposed development would be the only blemish or scar in every one of those 11 viewpoints. The houses would be clearly visible from the trails, the equestrian facility would take up far less of the view than the houses but at 160,000 square feet it is the same size as a Walmart Superstore, which is 170,000 square feet. He continued, the proposed development will damage the views and damage the trail experience. He stated at the trail conference they created a viewshed analysis and the data clearly shows that the development will not be hidden at all. Mr. Osborn requested that a genuine viewshed analysis be ordered for this project.

**Lynn Rogoff** – Ms. Rogoff stated she has lived here for 30 years and had received notice in the mail about this public hearing inviting her to attend this evening. She stated she cannot believe that last winter the public gave a detailed and extensive dedicated feedback to the Hudson Highlands Reserve and it appears that they chose rather to expand the plan and gave short attention to the public's major concerns. Ms. Rogoff stated it appears that it was not important to them and they chose to not decrease the equestrian center or the number of houses. She stated they have indoor swimming pools on their website as something that will go in the houses. They, Hudson Highland Reserve, continue to claim on their website that people will not use the community schools, roads and resources but will spend millions to visit once in a while. Their plan still calls for 40 horses and now there are plans for commercial events and classes and manure machinery on their website. Ms. Rogoff reported she has reviewed their website and it states that the central attraction to the development is the equestrian facility and they have determined the equestrian center, clubhouse, paddocks to compose the amenities package for the development including a separate building housing a second indoor arena and spectator area. Ms. Rogoff stated it now appears that they represent that this development will not use community roads, schools and other resources such as our water, light, wildlife and air. It does not make



sense that people would pay millions of dollars and not use our community resources. She says their representation appears to be greenwashing.

**Ray Warner, Cold Spring** – Mr. Warner reported that his family opposes the project and stated the study does not adequately address the affects of 25 houses on the wildlife corridors in the area. What they are most concerned about is the 40-horse equestrian center. He stated this pushes it way over the top and even if the houses were not too much this would clearly be too much. They question whether it adequately addresses the effects the horses will have on wildlife and whether the horses will be limited to the equestrian center or be roaming through the other areas of the property and if so, what effect that will have. He questioned if there is anything in the plan that will prohibit that from happening later on. Mr. Warner added they think the plan does not adequately address the affect of the equestrian center on neighboring wetlands.

**Judy Farrell, Town Board** – Ms. Farrell stated she is on the Town Board of Philipstown and received a copy of the DEIS and read it cover to cover. She stated it struck her on page 27 under *A.2, Public Need for the Project and Benefits*, that the applicants did not discuss the public needs of Philipstown residents but the needs of New York City residents, which was puzzling. Then on page 28 there's a lot of data from the American Horse Council on the economic impact of the equine industry. Ms. Farrell stated she loves horses but putting 40 horses alongside 25 new homes raises many questions that must be answered and not just about the economic benefits. Again, on page 31 there's an analysis on the best places in the US to buy an investment property and again it says that the weekenders are likely to purchase these properties and they're good long-term investment. Ms. Farrell reported it also said a stabled horse produces 50-70 pounds of manure daily adding that with 40 horses that comes out to 2,800 pounds of poop a day in our region. It's a little vague on how that will be handled in the impact. Ms. Farrell urged that we consider the input and speak to, survey, and have focus groups with the residents of East Mountain Rd N, East Mountain Rd S and Horton Road and hear what they might see as an adequate public and community benefit.

**Carli Fraccarolli, Scenic Hudson** – Ms. Fraccarolli stated she is the advocacy associate at Scenic Hudson and is delivering this testimony on behalf of Jeffrey Anzevino, director of land use advocacy at Scenic Hudson. As the first project seeking Planning Board approval as a conservation subdivision the board's review of this proposal will be precedent-setting. As proposed, the applicants preferred alternative E is inconsistent with provisions in the Philipstown conservation subdivision zoning code. Further, it would result in significant environmental impacts. Scenic Hudson believes that the project should be redesigned to be more consistent with the home siting of the applicants alternative D; this relocates 5 residences from the western side of Ulmar pond and clusters them on smaller lots. In addition, they believe that the equestrian facility should be reduced in size and laid out in a more compact arrangement leaving a wider habitat corridor to the south. As proposed, Hudson Highlands Reserve does not adequately meet town requirements for, nor the generally accepted definition of a conservation subdivision. The large house lots sprawl across the entire western half of the property dividing remaining natural areas into 3 separate sections resulting in forest fragmentation and would not protect the important habitat values found on the site. Scenic Hudson also disagrees with the applicant's assertion that removing the 5 homes from around the ponds west side and reducing impervious and disturbed area is inconsequential. Any reduction of impervious and disturbed area is relevant

and consequential and would result in a smaller amount of lower quality edge habitat that would drive away species that rely on these large areas of contiguous forest. Any losses of habitat on this site are a loss to some of the largest and most intact areas of forest habitat in the Hudson Valley. This area is within the Hudson Highlands Significant Biodiversity Area as well as the Hudson Highlands Forest Block designation. A more concerted effort should be made to cluster this development.

Chairman Merante advised anyone who has prepared written statements to submit them to the Planning Board secretary which will be included in the responses.

**Mark Tabashnick, East Mountain Rd S** – Mr. Tabashnick reported the attorney for the applicant says a great deal of study has gone into this project. He disagrees with that and if you look into some of their proposals pertaining especially to the equestrian center you will see that in detail, they want to set up a riding stable, a riding school and a riding camp. They also want to focus their studies on this area of horsemanship called dressage. Mr. Tabashnick stated it is a very disciplined and very expensive type of horse training and is not very well taken by most of the horse community in the US. Most of the horse communities are just about riding professionally, they may be training racehorses or things like that. So, to imply that there was a great deal of study into this means to him that they didn't look at the actual specifics of what they're proposing in their equestrian community. In fact, what would be more likely, and what he suggests the board delve into, is a zoning change to make this a more commercial activity rather than a residential activity and would probably be more appropriate; if they wanted to go ahead and develop a commercial equestrian center, that would probably be something that would be separate from residential. He stated that trying to bring these 2 together does not fall under the scope of what the community wants of a residential facility and if the scale is changed it would likely improve the acceptance. Mr. Tabashnick stated we all try to live together and if this is going to be a facility for everyone that he thinks it has to be addressed that way.

**Bill Schuster** – Dr. William Shuster stated he is a Cornwall resident, a professional ecologist, and has been executive director for 27 years of the nonprofit Black Rock Forest in the Hudson Highlands. In that capacity he has studied extensively Highlands ecology, has published a book chapter on the subject, and has used scientific knowledge and principles to manage the 4,000-acre Black Rock Forest for decades. He stated he is commenting on the DEIS prepared for the Hudson Highlands Reserve proposal to become Philipstown's first conservation subdivision. He stated this is a laudable concept and one that should help our communities live sustainably into the future while conserving natural resources, if implemented appropriately. To qualify as a conservation subdivision the zoning code states such projects must preserve contiguous open space and must protect areas with the most conservation value; in other words, those habitats critical for maintaining populations of our native species that are of special conservation concern. Mr. Schuster's 2 concerns are first that the project as proposed fails to the contiguous conservation criterion by establishing a barrier dividing the conserved parts of the project area and second that the environmental studies today failed to adequately address the local amphibian and reptile species of highest conservation concern and the habitats required by these species. These 2 problems should be addressed first by accomplishing surveys of breeding habitats and species in the seasons necessary, particularly vernal pools, during the April to May breeding season. There's no other way to know what species of concern are on the site. He stated wood

frogs were found on the site and these are obligate vernal pool breeding species; that means there must be vernal pools on site but no appropriate search to locate and map these habitats has yet been accomplished in the March to April time period when they must be evaluated. The Philipstown community should know whether or not a vernal pond requiring species of state level conservation concern, like the marbled and spotted salamander and other wetland requiring threatened species like the wood turtle, are on site. The DEIS as it stands does not present appropriate surveys to draw conclusions on this.

**J. Perry Pitt, Putnam Highlands Audubon Society** – Mr. Pitt stated he represents the Putnam Highlands Audubon Society with over 250 members in the area and stated they appreciate the thought and concern that the Planning Board is giving to this project. He stated it is the Audubon Society's position that the DEIS wildlife assessment for this project does not include essential and sufficient monitoring procedures. The field sightings did not cover the breeding and nesting times. For most species it did not cover a long enough period of time to establish the biological diversity that these lands support and what species breed and nest on site. In the DEIS the wildlife sightings and existing conditions are included with 4 field date visits on May 6 & 26, July 9 and August 1, 2015. 4 field study visits is simply too short a time span to conduct meaningful monitoring of birds. The absence of breeding bird surveys and counts for birds to determine they are not nesting have been omitted or not done. They ask the Planning Board to consider this is a conservation project and is the first of many. It must be the environmental model with real seasonal monitoring assessments with environmental standards and limits that any future project must adhere to before any consideration to the town.

**Karen Ertl, Garrison** – Ms. Ertl stated her intent was to remind everybody in the room that almost 2 years ago today the Town of Philipstown signed a Climate Smart Community agreement. She stated the County, just a few weeks ago, unanimously voted in a Climate Smart Community County. The agenda of that initiative is to look for ways to be smart about our climate and our development. She stated that while she understands and accepts that development is inevitable, and commended the board for doing an impact report, she thinks that now 'the rubber hits the road'. There are 2 bipartisan legislations in the state that would strengthen the protection of local wetlands and streams. Current DEC protection only covers areas that encompass 12.4 acres or more and it has to be on a DEC approved map. Ms. Ertl reported New York State is the only state without such corridors for small wetlands. More than a million species are at risk. This legislation would protect smaller wetlands, rivers, streams, creeks, lakes and wildlife. She encouraged the board not to hurry this project through but to see what the state of New York is doing to protect our small wetlands. She asked that the board please understand that it is setting the precedent for what a conservation subdivision looks like in the Town of Philipstown.

**Irene O'Garden, Garrison** – Ms. O'Garden stated she lives in Garrison but she knows this land and Ulmar Pond well. She stated she lived there for 12 years and walked much of this property. As it says in the environmental impact statement, most of the observed wildlife is right around that pond, kingfishers, geese, etc. So, one of the things she would like to see happen is those 5 houses be removed from the west side of the pond and conserve what is irreplaceable. She stated she fully supports HHLT's 8 recommended actions. Ms. O'Garden stated she is also concerned that, according to page 38 & 39 of the environmental impact statement, the critical maintenance

of the pond, stormwater management, wastewater, is going to be the responsibility of a Homeowners Association. She stated she looked this up and a HOA is essentially like a not-for-profit organization; people get elected to the boards, it's generally a volunteer thing. She stated she's sure that people who live in New York City and have a second home might want to get really involved in the HOA but they might just want to hire a management company, which plenty of people do, and it's very difficult to have any kind of legal proceedings against that. She explained that one of the things that makes the land so attractive is the land that she and her husband donated, 27 acres that is right next to it, that then became Clove Creek Preserve. She stated there is frequent mention in the statement about exotic and invasive species and noted that humans too can be a pretty invasive species. Ms. O'Garden stated that sustainable houses are a worthy goal but suggested we sustain the habitats that surround them and that our first conservation subdivision should serve as a model for those to come after as one day we will be absent but these decisions will live on.

**Andy Galler** – Mr. Galler explained he is a member of the Philipstown Conservation Board and he lives about as far away from this project in southern Garrison as one can in town. He stated he has read the binder cover to cover and is very familiar with the project. Basically, the intent of SEQRA is very, very specific and that is for the applicant, the developer, to work with concerned agencies and the community to balance environmental impacts with the effects that would happen on the economy and social aspects. Looking at the DEIS he was exceedingly disappointed. He stated if you take the Scoping document and compare it to this DEIS, and asked that the Planning Board and their experts focus on this tremendously, he thinks what you will find is huge areas of deficiency, old data, questions not asked and alternative plans cherry-picked so they're not really realistic. Mr. Galler then requested everyone look at the economics of the project. The housing market is flat and probably going to remain flat not so much because of the economy but we no longer have the \$10,000 deduction and millennials really don't want houses. So, all of a sudden, we have a complex that has intense mitigation that needs to be kept up continually but what happens if only 2 houses are sold or even only 10 houses are sold, is this feasible? Who is going to take care of it after that? He urged everyone, including the board, to really think about that.

**Mickey Deneher** – Mr. Deneher stated the idea is not to say no but how do we say yes? He stated he has been in Philipstown for 18 years and loves the community and how everyone takes care of it. He stated his concerns are also the scale and the concentration of the houses and the equestrian center. One of the things he has been thinking about is that the equestrian center is open to the public, so what's the volume there? He questioned if the houses will in fact become Airbnb's and what the volume could be there. He stated there's been talk of a traffic study and that the amount of accidents that have been happening lately are just too much; Route 9 gets closed down all the time. There is talk about the manure as it being held on site for 14 days, that's almost 20 tons, and then it's got to be transported out. He questioned what happens with that if there is a problem on Route 9. Mr. Deneher reiterated the fact that we don't want to say no, we want to say yes and see Philipstown go forward but we also want to see Philipstown maintain the beauty that everyone here believes in.

**John Benjamin** – Mr. Benjamin reported that he was born in Butterfield hospital about 74 years ago. He stated he would like to speak about manure and trout. Mr. Benjamin explained he

doesn't know much about horses but Rutgers University does and referred the board to their study that the Rutgers Equine Science Center did, a document that can be looked at online labeled '*Horses & Manure*' *Fact sheet #036*. Mr. Benjamin stated he was astounded to read that the average thousand-pound horse produces 10 to 12 tons of manure a year. If you do the math, 40 horses, that's 400-480 tons of manure a year. He stated it's also interesting that the state of New Jersey considers such large commercial equine centers to be concentrated animal feeding operations (CAFO). CAFO's are tightly regulated by the state in the hopes of preventing NPK nutrient pollution as well as vermin and pathogen introduction into adjacent aquifers, wetlands, ponds and/or streams. On the other hand, Mr. Benjamin reported he does know a great deal about trout and brook trout and about clean, clear streams and fishing. He stated he was born and raised in Garrison and has fished many of the small brooks. As a guide in Colorado and as a Trout Unlimited member, he stated his knowledge has grown over these 73.5 years.

**Adam Hird, 63 Horton Rd** – Mr. Hird reported that he is actually a professional real estate developer. He stated he has developed over 4 million square feet and has actually never seen a project get this far along without a traffic study. His understanding is that the state has denied the direct access to Route 9 and we don't know, as he stands here today, how they're accessing the property. He stated there has been talk of traffic and accidents on Route 9 but we also know that East Mountain Road and Horton Road are tight roads. Mr. Hird opined that this really needs to slow down, there needs to be a traffic study and the access needs to be figured out before it can go any further.

**Richard Butensky** – Mr. Butensky reported that the law says that an applicant may increase the permitted number of dwelling units by use of density bonuses granted at the discretion of the Planning Board. The applicant seems to think that they have a right to it but it's at the board's discretion. The density bonus as described shall not be considered an entitlement, that's what the law says, though it seems some people think it is. Preserved open space must not result in fragmentation of the open space land in a manner that compromises its conservation value; it says that in the law and Mr. Butensky expressed he thinks it's been compromised. The configuration of the open space land and dwellings shall not result in fragmentation of the open space land in a manner that interferes with its proper management and protection of its conservation values. The final determination as to which land has the most conservation value and should be protected from development by conservation easement shall be made by the planning board. It is not made by the developer, it's made by the Planning Board, that's in the law. Mr. Butensky stated there's an old joke, this guy prays to win the lottery, he prays and prays and prays and says "I'm a good man". Day and night, three times a day he prays. Finally, after years and years he's there praying and he hears a voice and it's God and he says "meet me half way, buy a ticket". They need to buy a ticket. This is conservation.

**Hadrien Coumans** – Mr. Coumans stated he was here representing a family that has been indigenous to this area for 12,000 years. He is co-director of Lenape Center, an indigenous organization. He stated they have been praying on this mountain since 2005, elders coming from Oklahoma, Wisconsin, Canada, South Dakota, Arizona and New Mexico and they know that this is a place of great sacral significance; this mountain should be left in peace. He stated he is part of an effort to bring the people home, the original people. They don't want this type of disrespect to continue anymore. He stated it is time to respect what we have in terms of our responsibility to

it and stop playing around with ideas of short-term thinking and short-term profit that only enhance the lives of maybe a minority and a few. Mr. Coumans stated we are all in this together but at the end of the day this is indigenous homeland; this is land that has deep spiritual religious significance and it must be left alone.

**Madeline Rae** – Ms. Rae explained that when she first was looking into the LLC that is behind this project, she was taken aback that they didn't put their names to it and that it was a blind LLC. So, she looked at the architect whose name is on all the filings and his address matches the address of the LLC, it's the same one. It's in New York, 91<sup>st</sup> Street, and also that address is shared with a construction company. So, right now, she knows who the developers are because they're all living together or working together in New York City. And not that that's a crime or means that it shouldn't be done or developed, but it seems to her that these people can move this development anywhere. The cons tonight outweigh the pros. They live in NYC, they're just looking for a place to put an equestrian subdivision. She stated equestrian subdivisions are the latest fad in subdivisions in America, California, Texas, Florida, the Carolina's. Golf subdivisions are played, they're saturated, so now they're doing subdivisions with horses. Ms. Rae reported these are first-time builders of this subdivision. If you go on the architect's website there's not a 25, 1-acre home development on the site. The construction company, there's not a 25 home, 1-acre development, there's not an equestrian center. The architect says on his site that he is the general contractor of all his projects which include homes and interiors. She stated she does not know how this is our first project and it seems to her that we have to trust these first-term developers who are just looking for a fad. They're just developers to make money promising us a lot of tax dollars. She questioned, what if this development turns into a 501-C and if that has an implication on our tax dollars, she does not know. She stated the board does not have a crystal ball but it does have a responsibility to pass the baton as stewards to the next Planning Board members.

**Alan Brownstein** – Mr. Brownstein informed the board that he and his wife Patty moved here in 2015 after deciding in 2005 that they were determined to move here. He stated they live in Glassbury Court which is less than 1 mile from the site. They live there with nearly 200 other residents. Mr. Brownstein stated he does not know the views of all the other residents of Glassbury Court as to whether they support or oppose the project but he does know that there is considerable concern and that concern is noticeable by the number of people from that community that are present tonight. He asked that everyone in the room from Glassbury raise their hand. He stated his point to the board is that there is a large community here with considerable concern about the decision that is being made. He stated the expertise here and the process that is taking place is excellent and it is important to avoid a mistake with this decision because once a mistake is made it cannot be undone. Mr. Brownstein questioned if people know the difference between an optimist and a pessimist and stated the answer is simple, the pessimist has better data. He stated he is impressed with the fact that many of the questions being raised are data-driven and looks forward to a good decision by this Planning Board.

**David Gordon** – Mr. Gordon stated that on the surface the development of only 39 acres of a 210-acre site sounds ideal, but the devil is in the details usually. There's good reason that 171 acres were left undeveloped and are not going to be ever developed and those acres tend to be on terrain that's too steep and too wet to be considered. The proposed development of 25 LEED

platinum-level certified homes and 40 horse barn dressage complex will effectively split the 210 acres in such a way as to preclude the natural and safe passage of any wildlife along this corridor. And poor old Clove Creek takes yet another hit of a magnitude that it can ill afford. Perhaps someone could explain the section in the DEIS on page 14 section *B.2.C entitled Forest Fragmentation Impacts*. Its concluding sentence states “there will be no true fragmentation though there will be some habitat perforation.” Mr. Gordon suggested the use of the adjectives ‘true’ and ‘some’ seemed to be quite telling and stated it sounds like ‘being a little pregnant’. He concluded, we here in Philipstown have more than 25 of these designated conservation subdivisions, let us not lower the bar and set a poor example in this, the first test of this enlightened zoning mechanism.

**Ann Hammond** – Ms. Hammond explained that her family has lived on East Mountain Rd S for 50+ years and she had written a letter to the Planning Board last year. She reported that not one point in that letter was addressed in the DEIS and nothing was changed in the plan. She reported she has also submitted a 7-page letter which she dropped off yesterday and sent via email the day before. Ms. Hammond stated she realized the 1 thing no one has mentioned, maybe someone has thought about it, but we’ve talked a lot about the tonnage of manure going out, well, this is completely unstainable, environmentally. Everything those horses eat has to come in too because they can’t live on 11 acres. In fact, they’re not even really allowed out. She stated, we will leave aside the fact that these are actually sensitive herd animals that need to graze for health, that’s not the point of the DEIS although it is, in her opinion, inhumane. But, all of that food has to come in on great big trucks because they’re not allowed grazing out there on that land. So, however many thousands of pounds of poop are going out just as many is coming in, in great big trucks, on those two tiny roads that you can barely get out of already because we know now that DOT is not letting them out on Route 9. She opined that a lot has yet to be considered about this project and she does not like how casually all of the assumptions that it will all be okay are being made in the document.

**Steven Loria** – Mr. Loria reported that he lives on East Mountain Rd. He stated that he had submitted a letter back in February of 2018. He stated he did not have the time here tonight that it would take to restate all the already made points from the Hudson Highlands Land Trust and all of the public comments and letters and points made against the project, however is in complete agreement with those arguments. He wished to also highlight the points of other concerned citizens here in Philipstown including the individual from the NYS Trails Conference and the impact on the views, it’s really important to consider. He also supports the comments made about how this project is completely inconsistent with the Philipstown Comprehensive Plan and existing code related to the subdivision. This project will set a horrific precedent on future developments to be considered under that. Several other points he wished to also reiterate are the impacts on the water aquifer as well as the amount of water the project will be consuming with 25 houses and 40 horses, the numbers are astonishing. The manure that those horses would produce is also a significant reason not to allow this development as is. The traffic situation and how the DOT comments will be addressed is something he would like to know. He is concerned that if the decision is to move access to East Mountain Rd N how that would create a more dangerous situation than already exists. For those people that are making left turns on EMRN from Route 9, it’s already dangerous as cars pass on the right-hand side. He questioned if this board allows that type of access if it will take responsibility for the accidents that may cause.

**Craig Muraszewski** – Mr. Muraszewski stated he lives at the very bottom of the proposed plan, where the road would enter. He stated in purchasing his home two and a half years ago he had no idea, no plan, there is no sign, there is no proposal that there would ever be 25 homes and an equestrian center across from the 9 acres of property that he purchased, nor would he have put his family's life savings into a home that was abandoned essentially to know that suddenly 25 homes would be across the street from him. That being said, in his first year there they called the Sheriff's Department and 45 minutes later someone showed up. He questioned if Philipstown or Putnam County has put any plan in place for fire, additional police, ambulance or anything to assist these homeowners because at the moment when you call it's all volunteer for the Fire Department, the Sheriffs are very stretched and the ambulances are also volunteer. His last comment was to question if anyone has thought about the mental health of the people of this community, the noise, the traffic, the anger that this will bring upon the people who live within that area. He suggested we really have to think about the mental health of what people will feel; the stress on the road, being bombarded by trucks and the sounds of chainsaws and every day drilling, all of that noise. He stated there's a reason that all of these people pointed out several things here. The law is in place to protect land and they were written for reasons and the board is here to uphold those laws.

Mr. Werner stated he wished to point out, because a lot of stuff was raised about the DOT comments that, in addition to the public comments that we're hearing tonight and that are coming in in written form as well by the July 8<sup>th</sup> deadline, the DEIS was also circulated to the interested and involved agencies after it was accepted last month. So far there's been the DOT comments, again that just came this month, requesting some additional information from the applicants traffic consultant, among other items. Since these comments came from an involved agency the applicant is required to address those for the Final EIS and it is Mr. Werner's understanding that they have already agreed to do that. As far as the next steps here, the July 8<sup>th</sup> deadline is for written comments, that will remain open. Once that is expired all these comments that have been given tonight, which have been recorded by a stenographer, which are also on video and in written form, will be compiled by the applicant and their consultants. They'll share those with the board's consultants for review prior to releasing them to you guys to review them for official release on preparing the FEIS. So, at the July meeting there should be a set of comments put together by the applicant's team, reviewed by the board's consultants first, given to the board and then at that meeting the board can officially release them to address those for the FEIS. Mr. Werner continued, the FEIS, the SEQRA regulations have a minimum 45 days from the end of the public hearing is when the FEIS should be filed but that can also be extended under different circumstances should it be necessary. We will have to wait and see at the next meeting if we need to do that but for now these comments will all be compiled and shared with the consultants first and then we'll talk about them at the July meeting.

Chairman Merante questioned when this will all be ready for public review. Mr. Werner explained that after the July 8<sup>th</sup> deadline, between then and the July 18<sup>th</sup> meeting those comments should be all put into written form by the applicant's team summarizing what's been heard this evening, what's been sent in writing. They have to categorize them by topic in the DEIS and then those should be shared with the Town's consultants. The consultants will review those before



providing them to the board and then at the meeting on July 18<sup>th</sup> we'll review them all as a group and the board will decide if it wants to go ahead and give them the green light to go ahead and start addressing those for the FEIS.

Mr. Gaba stated he would just like to point out for everyone who spoke tonight that the board necessarily had to limit the amount of speaking time because of the large number of people who appeared this evening. As Mr. Werner alluded to the written comment period is open until July 8<sup>th</sup> so if anyone had something that they wanted to say that they didn't get a chance to get out in their 2 minutes or if they simply wish to reinforce what they said, you can submit written comments to the board up to July 8<sup>th</sup> and your comments will be considered. Mr. Gaba explained to the Chairman, what Mr. Werner was speaking about as far as the next step is that in order to prepare the FEIS the applicant has to put together every comment and question that has been raised and then address that in the FEIS. So, what's going to happen next is we're going to get a compilation of all the comments that you've heard, and you want to make sure all the comments are included within it so if there's something that's left out you have to point it out, and when the board is satisfied that all of the comments, all the issues raised are in that then you give the applicant the green light to prepare the FEIS and that is what's going to happen at next month's meeting.

Mr. Zuckerman suggested that sounds like an odd process. The public speaks, the applicant writes down what the public said about the project – it's strange – and then come back and tell us what these people said about their project?

Mr. Gaba explained they are going to address the comments. Mr. Zuckerman questioned who is writing the list of all the comments?

Mr. Gaba stated the applicant is. Mr. Gaba stated there will be the stenographic record to review as well. He stated that is just the first step; the second is preparing the FEIS to address those questions and comments. That document will be put together saying how those were addressed and why and how those potential environmental impacts are being mitigated, but that's a step beyond what's going to happen in July.

Mr. Gainer stated that as has been described already by the consultants, all the comments received, both written and verbal, are going to be assembled. That's going to be done through the Planning Board Secretary, and with the receipt of the stenographic record, and then formally the board is going to submit that record to the applicant and ask them to respond. So, there's going to be significant effort to put together all those comments to assure that the compilation is complete and is formally transmitted from the Planning Board, as lead agency, to the applicant with the direction to respond to all comments raised.

Mr. Werner stated we are giving the applicant first crack at compiling the comments for review by the Planning Board, approving them, and then going ahead and addressing them for the FEIS after the July meeting. A member of the public questioned what happens then. Mr. Werner explained, July 18<sup>th</sup> is when the board will officially release the set of comments for the applicant to address in the FEIS, which could take a while to develop but, in that document, there will be responses to all the comments raised. There will be responses to the DOT and any other involved

agency comments that come in between now and July 8<sup>th</sup>. Mr. Werner noted that the board is welcome to also submit comments by July 8<sup>th</sup> and the consultants are also going to have some comments as well.

Peter Hoffman of Garrison approached the microphone and questioned when the board anticipates that there will be a conclusion to these deliberations. Chairman Merante stated they do not have an answer for that question.

Mr. Gaba explained the way that it works is the FEIS will be prepared by the applicant and submitted to the board. The board will consider it much like they considered the DEIS and determine whether or not to accept it, whether all the comments have been adequately addressed, all of the issues were addressed within it. Then, once they accept that the board will go on to consider a document called a Findings Statement, and the Findings Statement is going to determine whether or not all of the identified potentially significant adverse environmental impacts have been mitigated to the maximum extent practicable or, if they haven't been, do you have to make changes to the plan in order for that to occur or, if they can't be, whether the application should be denied because they're not. So, the Findings Statement is, he thinks, the penultimate step before determination is made on this, and we can't give a time as to when that's going to occur. It's going to depend in large part on how soon the applicant turns around submitting the FEIS and whether it's complete once it's submitted.

Ms. Conner moved to close the public hearing except for written comments which will be accepted through July 8<sup>th</sup> and Mr. Tomann seconded the motion. The vote was as follows:

Anthony Merante	-	Aye
Kim Conner	-	Aye
Dennis Gagnon	-	Aye
Peter Lewis	-	Aye
Neal Tomann	-	Aye
Neal Zuckerman	-	Aye
David Hardy	-	Aye

Ms. Conner moved to adjourn the meeting and Mr. Tomann seconded the motion. The vote was as follows:

Anthony Merante	-	Aye
Kim Conner	-	Aye
Dennis Gagnon	-	Aye
Peter Lewis	-	Aye
Neal Tomann	-	Aye
Neal Zuckerman	-	Aye
David Hardy	-	Aye

The motion passed unanimously and the meeting adjourned at 9:16 pm.

Date approved \_\_\_\_\_

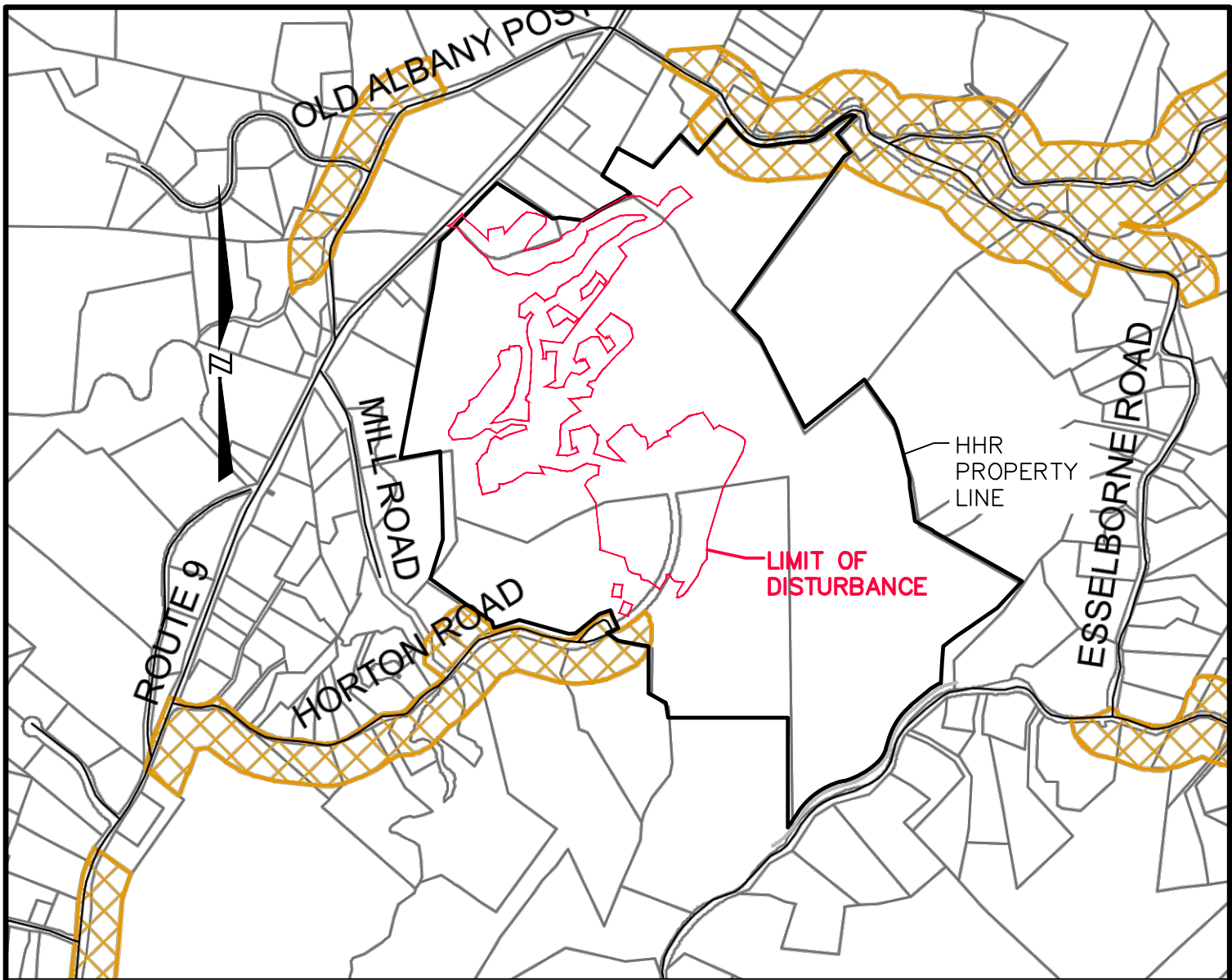
Respectfully submitted by,

Tara K. Percacciolo

\*These minutes were prepared for the Philipstown Planning Board and are subject to review, comment, emendation and approval there upon.

**APPENDIX C**  
REVISED DEIS FIGURES

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*Scenic Protection Overlay (SPO)*

OVERLAY DISTRICT SOURCE TOWN OF PHILIPSTOWN RESOURCE PROTECTION OVERLAY DISTRICT ZONING MAP 2011

**PREPARED BY**

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3063 Route 9 Cold Spring, NY 10516  
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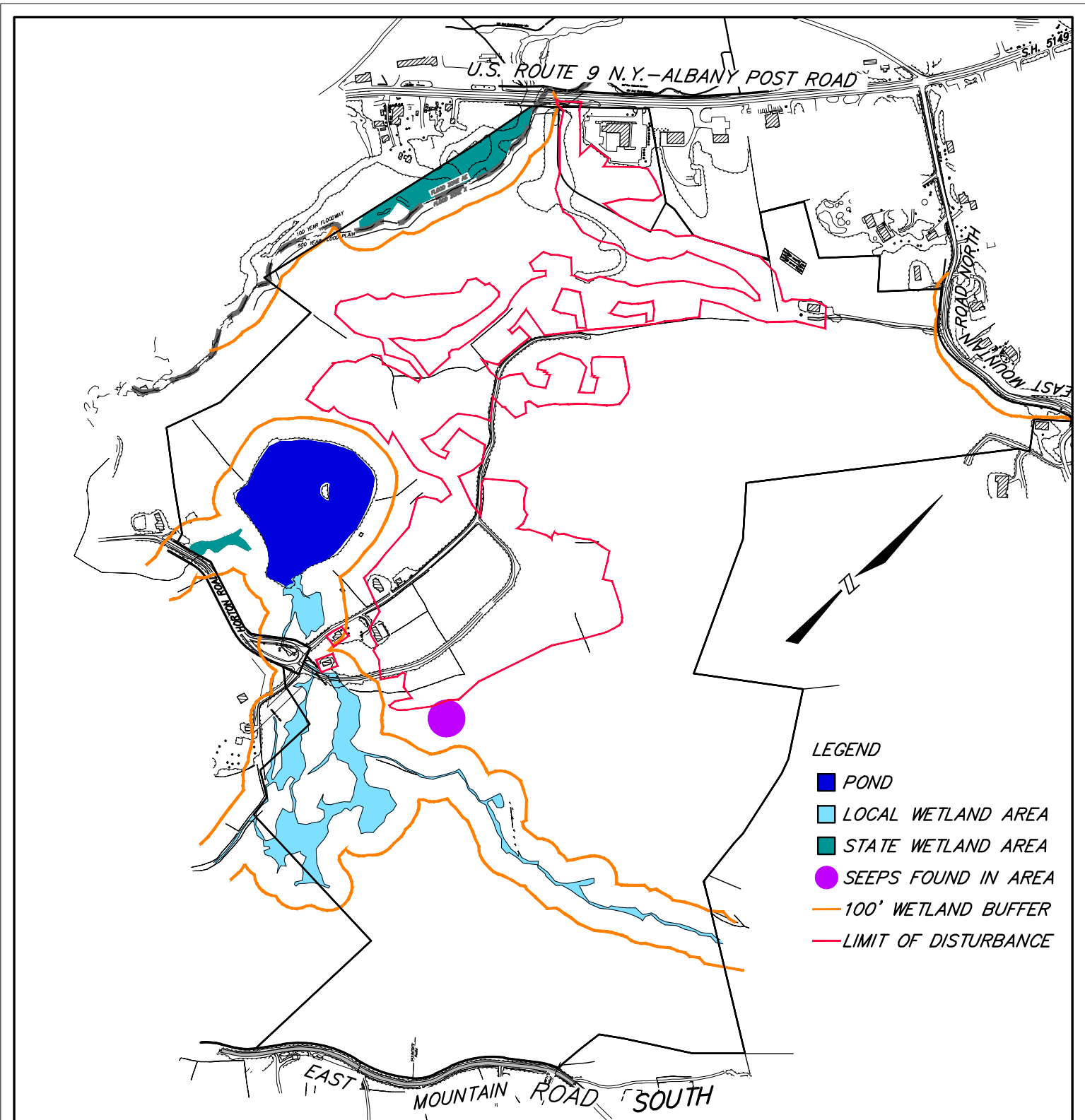
845.265.9217  
845.265.4428 (Fax)  
877. 3.141593 (Toll Free)

**SCENIC PROTECTION OVERLAY DISTRICT**  
 PREPARED FOR  
**ENVIRONMENTAL IMPACT STATEMENT**  
 FOR  
**HUDSON HIGHLANDS RESERVE**  
 SITUATE IN THE  
**TOWN OF PHILIPSTOWN**  
**PUTNAM COUNTY**  
 NEW YORK

NOT TO SCALE

MARCH 3, 2022

**DEIS FIGURE 09**



**LEGEND**

- POND
- LOCAL WETLAND AREA
- STATE WETLAND AREA
- SEEPS FOUND IN AREA
- 100' WETLAND BUFFER
- LIMIT OF DISTURBANCE

**WETLANDS AND SEEPS**

PREPARED FOR  
ENVIRONMENTAL IMPACT STATEMENT

FOR  
**HUDSON HIGHLANDS RESERVE**  
SITUATE IN THE  
**TOWN OF PHILIPSTOWN**  
**PUTNAM COUNTY**  
NEW YORK

NOT TO SCALE

MARCH 3, 2022

**DEIS FIGURE 19**

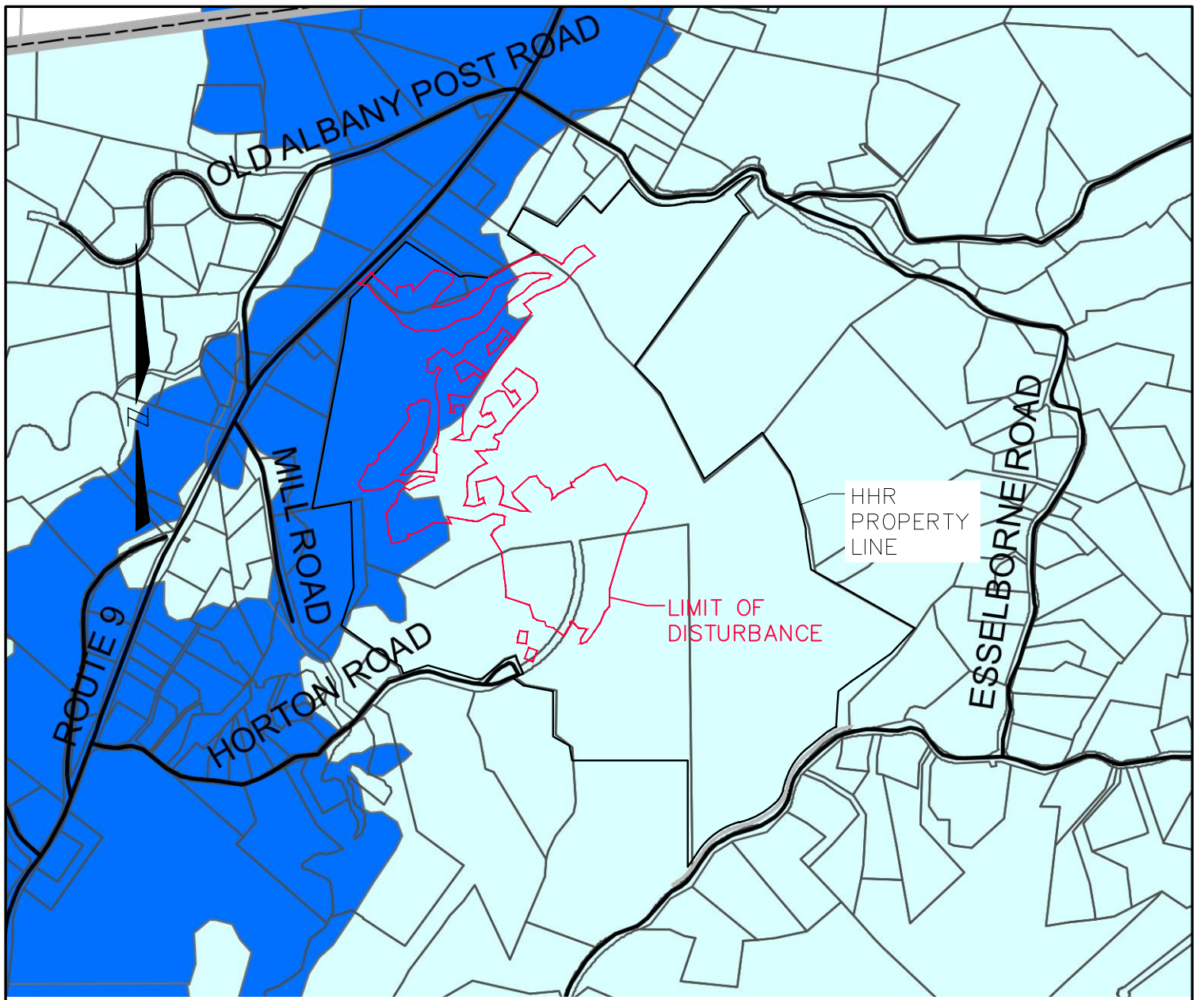
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- Clove Creek Aquifer (CCA)
- Regional Aquifer (RA)

OVERLAY DISTRICT SOURCE TOWN OF PHILIPSTOWN RESOURCE PROTECTION OVERLAY DISTRICT ZONING MAP 2011

*COLD SPRING WATERSHED OVERLAY AND AQUIFER OVERLAY DISTRICT MAP*

*PREPARED FOR ENVIRONMENTAL IMPACT STATEMENT*

*FOR HUDSON HIGHLANDS RESERVE  
SITUATE IN THE TOWN OF PHILIPSTOWN  
PUTNAM COUNTY  
NEW YORK*

*NOT TO SCALE*

*MARCH 3, 2022*

*PREPARED BY*

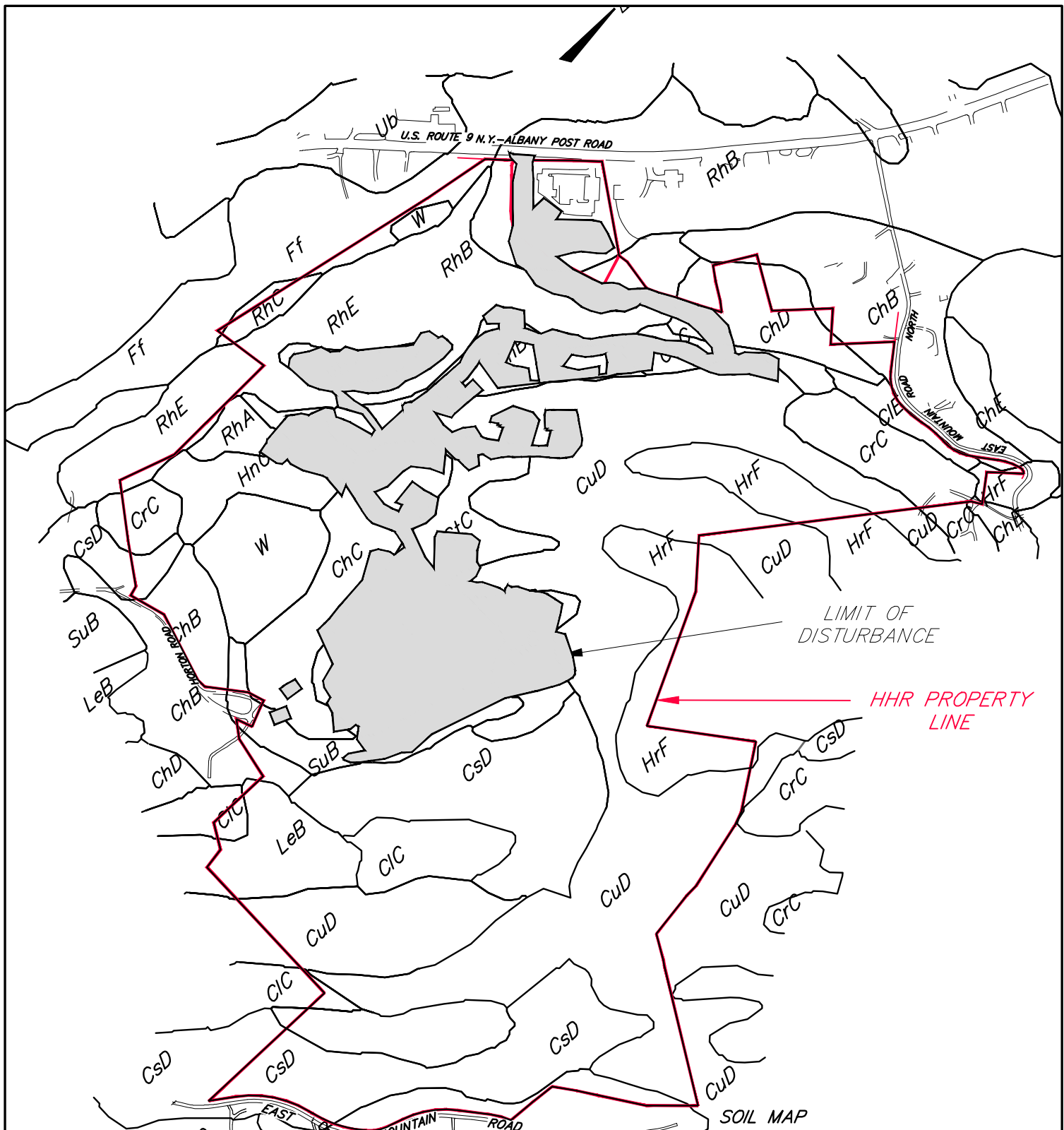
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*DEIS FIGURE 20*





LIMIT OF DISTURBANCE

HHR PROPERTY LINE

PREPARED BY

SOIL MAP  
PREPARED FOR

ENVIRONMENTAL IMPACT STATEMENT

FOR

# HUDSON HIGHLANDS RESERVE

SITUATE IN THE

TOWN OF PHILIPSTOWN

PUTNAM COUNTY

NEW YORK

NOT TO SCALE

MARCH 3, 2022

DEIS FIGURE 21

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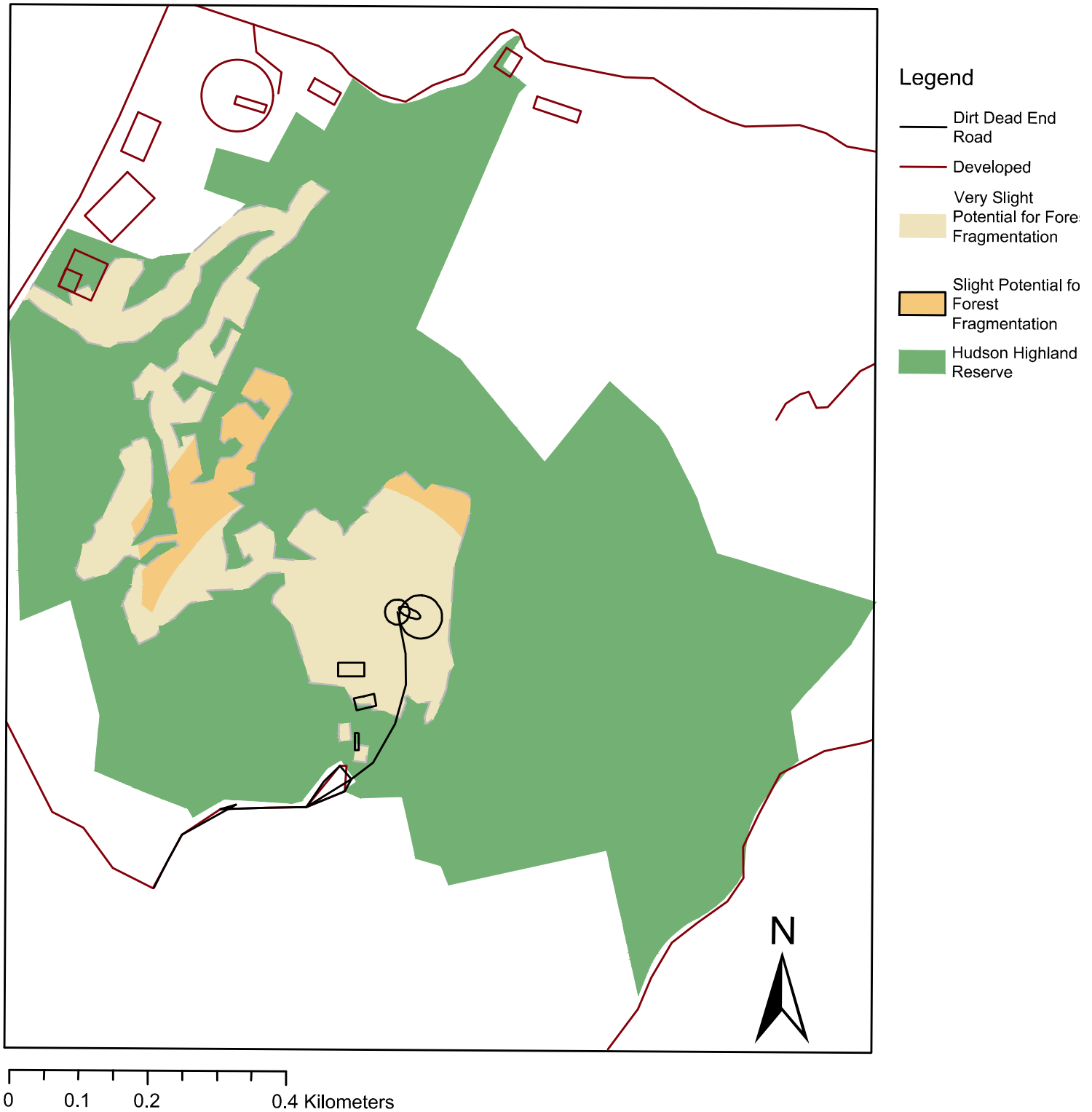


Figure 32: Forest Connectivity



# Hudson Highlands Reserve Forest Fragmentation Potential Figure 33

The colors indicate into which category of risk the sections of the potentially developed areas ("limit of disturbance") fall into.



**Albany Post Rd N**

OLD ALBANY POST RD

**East Mountain**

**Lorsemens Trail**

HHR PROPERTY LINE

LIMIT OF DISTURBANCE

ROUTE 9

MILL ROAD

HORTON ROAD

ESSELBORNE ROAD

**Clove Creek**

**Fahnestock**

State Park buffer



*Open Space Conservation Overlay District (OSO)*

OVERLAY DISTRICT SOURCE TOWN OF PHILIPSTOWN RESOURCE PROTECTION OVERLAY DISTRICT ZONING MAP 2011

**OPEN SPACE OVERLAY DISTRICT**  
PREPARED FOR  
**ENVIRONMENTAL IMPACT STATEMENT**

FOR  
**HUDSON HIGHLANDS RESERVE**  
SITUATE IN THE  
**TOWN OF PHILIPSTOWN**  
**PUTNAM COUNTY**  
NEW YORK

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**DEIS FIGURE 34**

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**APPENDIX D**

**VERNAL POOL INVESTIGATION,**

**DATED APRIL 26, 2019**

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**ERS CONSULTANTS, INC.**  
**11 Forester Avenue \* Warwick, NY 10990**  
**Tel # (845) 987-1775 \* Fax # (845) 987-1788**

---

## **INTRODUCTION**

This vernal pool report has been prepared by ERS Consultants, Inc. in support of an environmental impact statement for the Hudson Highlands Reserve Project. The Project is a proposed residential subdivision on approximately 205+/- acre site located in the Town of Philipstown, Putnam County, New York. The property is irregularly shaped, lying between US Route 9 to the west, East Mountain Road South to the east, Horton Road to the south and East Mountain Road North to the north. The Project is known as Section 17, Block 1, Lots 39, 76.111, 76.112, 76.21, and 77.2 on the Putnam County tax maps.

## **METHODOLOGY**

For purposes of this field study ERS Consultants, Inc. adopted the New York State Department of Environmental Conservation (NYSDEC) Natural Heritage Program definition of vernal pools as follows: Vernal pools are intermittently to ephemerally ponded, small, shallow depressions usually located within an upland forest. They are typically flooded in spring or after a heavy rainfall, but are usually dry during summer. Many vernal pools are filled again in autumn. The substrate is dense leaf litter over hydric soils. Vernal pools typically occupy a confined basin (i.e., a standing waterbody without a flowing outlet), but may have an intermittent stream flowing out of it during high water. Since vernal pools cannot support fish populations, there is no threat of fish predation on amphibian eggs or invertebrate larvae. Characteristic animals of vernal pools include species of amphibians,



reptiles, crustaceans, mollusks, annelids, and insects. Vernal pool amphibians include spotted salamander (*Ambystoma maculatum*), blue-spotted salamander (*A. laterale*), Jefferson's salamander (*A. jeffersonianum*), marbled salamander (*A. opacum*), and wood frog (*Rana sylvatica*). Fairy shrimp (*Anostraca*) are obligate vernal pool crustaceans, with *Eubranchipus* spp. being the most common.

This definition of vernal pools, like many other definitions of vernal pools contain language referring to “obligate” species. However, several obligate species, such as spotted salamanders and wood frogs, breed in other wetland areas such as roadside ditches and small ponds (Calhoun & Klemens 2002).

Vernal pool surveys consisted of meandering surveys conducted over the entire subject site by myself, a Certified Wildlife Biologist and Professional Wetland Scientist with over twenty years of experience and I am familiar with vernal pool resources during the recommended timeframes for identifying amphibian egg masses. I am experienced in threatened & endangered species surveys and habitat assessment. I am qualified as an environmental inspector for utility projects, licensed timber rattlesnake biologist in New York, New Jersey and Connecticut, and an environmental monitor for bog turtle, Blanding's turtle, bald eagle, and timber rattlesnake. My resume can be found at the end of this report. Seasonal and weather conditions were considered when conducting the surveys which occurred during April 6, 2019 (6.0 hours), April 13, 2019 (5.5 hours), April 18, 2019 (5.5 hours) and April 23, 2019 (5.0 hours). The New York State Department of Environmental Conservation (NYSDEC) states on their web page that “April is generally a good month to visit vernal pools in New York”.

## RESULTS

The site is dominated by upland deciduous forest, typically Oak-Tulip and Chestnut-Oak forests as described by Edinger et al (2014). Several wetland and watercourses have been delineated on the subject site. A hillside wetland and watercourse is located east of the Horton Road extension into the project site and flows west into a 6+/- acre pond on site. The pond drains south, under Horton Road and eventually into Clove Creek to the west. A small portion of Clove Creek lies within the subject site before flowing northwest under US Route 9.

The hillside wetland is fed by seeps and surface water and ephemeral streams drain these wetlands down to the pond. This wetland system is dominated by red maple (*Acer rubrum*) in the overstory, spicebush (*Lindera benzoin*) in the shrub layer and jewelweed (*Impatiens capensis*), skunk cabbage (*Symplocarpus foetidus*) and cinnamon fern (*Osmunda cinnamomea*) in the herbaceous layer. The wetland would be classified by the US Fish & Wildlife Service as a Palustrine Forested Broad-leaved deciduous (PFO1) Wetland (Cowardin, 1979). The pond is impounded by an earthen dam and has a distinct edge around it. Largemouth bass (*Micropterus salmoides*) and bluegill sunfish (*Lepomis macrochirus*) were observed in the pond along with Eastern painted turtles (*Chrysemys picta*) and common snapping turtles (*C. serpentina*).

During the field survey of the entire subject site no vernal pools were observed. This study is consistent with previous studies conducted in the subject site. Those reports include the Wetland Delineation and Environmental Assessment – Initial Report by Stephen W. Coleman Environmental Consulting (2014) and the Wetland Delineation and Environmental Assessment – Supplemental Report by Hudson Highlands Environmental Consulting (2015). In the latter report on page 246, the authors state “No areas were observed that contained evidence of or would support the seasonal presence of vernal pools. Additionally, no endangered, threatened or species of concern were observed. No egg masses were observed within the subject property. During the same time period egg masses were observed on two sites north and east of

the subject site. Table 1 below is a list of reptiles and amphibians found on the property.

<b>TABLE 1</b>	
<b>COMMON NAME</b>	<b>SCIENTIFIC NAME</b>
Eastern Painted Turtle	<i>Chrysemys picta</i>
Common Snapping Turtle	<i>Chelydra serpentina</i>
Eastern Garter Snake	<i>Thamnophis sirtalis</i>
Pickerel Frog	<i>Lithobates palustris</i>
Green Frog	<i>Lithobates clamitans</i>
Spring Peeper	<i>Pseudacris crucifer</i>
Eastern Red-backed Salamander	<i>Plethodon cinereus</i>
Northern Dusky Salamander	<i>Desmognathus fuscus</i>
Eastern Newt	<i>Notophthalmus viridescens</i>
Northern Two-lined Salamander	<i>Eurycea bislineata</i>

## REFERENCES

Calhoun, A.J., M.W. Klemens. 2002. Best Development Practices: Conserving Pool-Breeding Amphibians in Residential and Commercial Developments in the Northeastern United States. MCA Technical Paper #5. Metropolitan Conservation Alliance, Wildlife Conservation Society, Bronx, New York.

Coleman, Stephen W. 2014. Wetland Delineation and Environmental Assessment – Initial Report. Stephen W. Coleman Environmental Consulting.

Cowardin, L.M. 1979. Classification of Wetlands and Deepwater Habitats of the United States.

Edinger, G.J., D.J. Evans, S. Gebauer, T.G. Howard, D.M. Hunt, and A.M. Olivero (editors). 2014. Ecological Communities of New York State. Second Edition. A revised and expanded edition of Carol Reschke's Ecological Communities of New York State. New York Natural Heritage Program, New York Department of Environmental Conservation, Albany, NY.

Gross, Stephen M. 2015. Wetland Delineation and Environmental Assessment – Supplemental Report. Hudson Highlands Environmental Consulting.

New York Natural Heritage Program. Available online at <https://guides.nynhp.org/vernal-pool/>

A handwritten signature in black ink, appearing to read "David Griggs". The signature is written in a cursive style with a large initial "D".

David Griggs

Senior Scientist

ERS Consultants, Inc.

April 26, 2019

**EDUCATION** Duke University, MS - Environmental Management  
SUNY College of Environmental Sciences & Forestry, BS Wildlife Biology & Mgmt  
Syracuse University, BS Biology  
Brevard College, North Carolina, AS Forest Biology

**TECHNICAL TRAINING** US Fish and Wildlife Service Habitat Evaluation Procedures (HEP), Certified  
Adamus Wetland Functional Assessment Methodology (WET), Certified  
US Fish and Wildlife Service Instream Flow Incremental Methodology (IFIM)  
NYSDEC Certificate of Erosion and Sediment Control

**RESPONSIBILITIES** Principal Scientist. As a Certified Wildlife Biologist and Professional Wetland Scientist, Mr. Griggs is responsible for coordinating and supervising environmental impact statements, natural resource/endangered species inventories and assessments, wetland delineations and mitigation projects, environmental permitting and technical training in wetland ecology.

**EXPERIENCE** Twenty years of professional experience in wetlands ecology and wildlife management in the US and overseas.

Representative Projects include:

Pipeline Projects including Millennium Pipeline; Tennessee Gas Pipelines; Spectra Energy's Algonquin Pipeline, and Columbia Gas Pipelines, NY, NJ, PA. Environmental Inspector and conducted environmental monitoring for endangered species including timber rattlesnake, bog and Blandings turtles. Complied with Federal Energy Regulatory Commission (FERC).

Ramapo Mountain Land Company, Rockland County, New York. Conducted endangered species assessment including flora and timber rattlesnake; habitat assessment; mark and recapture; radio-tracking.

Manhattan Woods Golf Course, Rockland County, New York. Supervised wetland delineation for a 220-acre proposed golf course. Services also included wetland permits; preparation, approval and implementation of mitigation (wetland creation) plans.

Pine Barrens Work, New York, New Jersey, New Hampshire. Utility ROW corridor work conducted presence/absence as well as habitat assessments and restoration for endangered & threatened species. Species included various flora, Eastern tiger salamander, Northern pine snake, timber rattlesnake, Pine Barrens tree frog, barred owl, and Karner blue butterfly.

Harmon Meadow Wetland Mitigation Design and Construction Services, Secaucus, New Jersey. Field Manager for a 150-acre wetland mitigation project, including design, federal and state regulatory coordination and approvals, pre/post project environmental monitoring and coordination of public presentations. Preparation of environmental assessments using a computer-based Habitat Evaluation Procedures (HEP) and Adamus (WET) analysis development and coordination of biologic, water and sediment quality sampling programs.

**Landfill Design and Environmental Studies for Major New York State Regional Landfill.** Performed wildlife and habitat inventories of proposed landfill and resource recovery sites for environmental impact statements conducted under NYSEQRA. Ecological assessments included methods to avoid and mitigate impacts. Evaluation of sensitive environmental features including endangered species and wetlands, including a Wetlands Delineation and Permitting.

**Wetland Investigation, Permitting and Mitigation, New York and New Jersey.** Responsible for wetlands delineation, report preparation and permitting, in accordance with U.S. Army Corps of Engineers, New Jersey Department of Environmental Protection and New York State Department of Environmental Conservation regulations. Preparation of freshwater and brackish wetland mitigation plans. Clients included the U.S. Navy, United Parcel Service, Hartz Mountain Development Corporation, Bellemead Development Corporation, Rivervale Realty Company, numerous land developers, golf courses, municipalities, and engineering firms.

**Virginia Department of Transportation - Environmental Services (statewide).** Field Manager of Williamsburg and Alexandria Environmental Assessments and Springfield Bypass 4(f) statements for the Virginia Department of Highways and Transportation to meet FHWA environmental requirements. Conducted biotic surveys, including the computer-based Biotic of Virginia (BOVA) analysis, Phase 1 bog turtle surveys, and preparation of mitigation concepts for wetland impacts.

**Air Force Base Joint Use Master Plan and Environmental Assessment, Illinois.** Technical Specialist responsible for the coordination of the environmental assessment for the proposed expansion of the air base and introduction of civil air traffic for the Illinois Department of Transportation. Analysis focused on impacts to the natural resources including wetlands and farmlands, and mitigation plans for bottomland hardwoods. Endangered turtle survey work included spotted, Eastern river, yellow mud, and Blandings turtles.

**Pumped Storage Hydroelectric Project and FERC License Application, New Jersey.** Assessment of existing conditions and potential impacts on terrestrial and aquatic fauna and flora for the FERC license application. Endangered species surveys included Indiana bat, timber rattlesnake, copperhead, and bog turtle.

**Wetland Mitigation Plan and Permitting, New Jersey.** Vegetative survey for the Bellemead Development Corporation EPA Section 309 Order and environmental analysis using the HEP program. This work was conducted on the Hackensack River, Berry's Creek, Mill Creek and Cromakill Creek in New Jersey.

**New York University Medical Center (Laboratory for Experimental Medicine and Surgery in Primates).** Consultant for primate release program in tropical portions of Africa. Responsible for breeding and behavior analyses and monitoring environmental conditions for 300 primates.

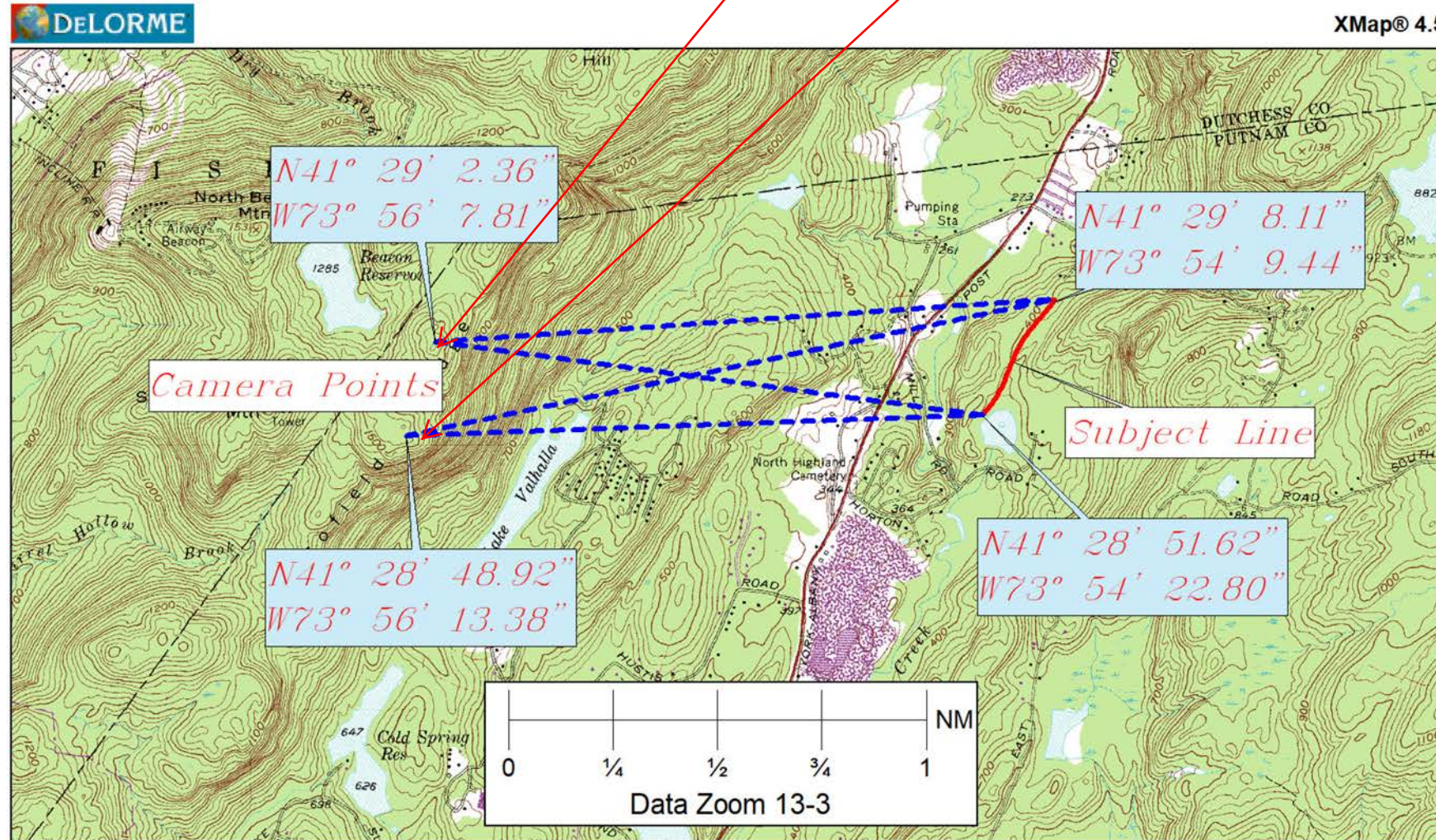
**Lawler, Matusky and Skelly Engineers, New York.** Field Technician responsible for the analysis of ichthyoplankton samples, seining, identifying and sorting various species of fish for the FHWA/NYS DOT Westway project.

**MEMBERSHIPS**

**Society of Wetland Scientists-Certified Professional Wetland Scientist  
Wildlife Society-Certified Wildlife Biologist  
Adjunct Faculty for Continuing Education, Rutgers University**

**APPENDIX E**  
**VISUAL IMPACT FIGURES**





Data use subject to license.  
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 www.delorme.com

# HUDSON HIGHLAND RESERVE

## TOWN OF PHILIPSTOWN

### PUTNAM COUNTY

### NEW YORK

## VISUAL IMPACT ANALYSIS

from

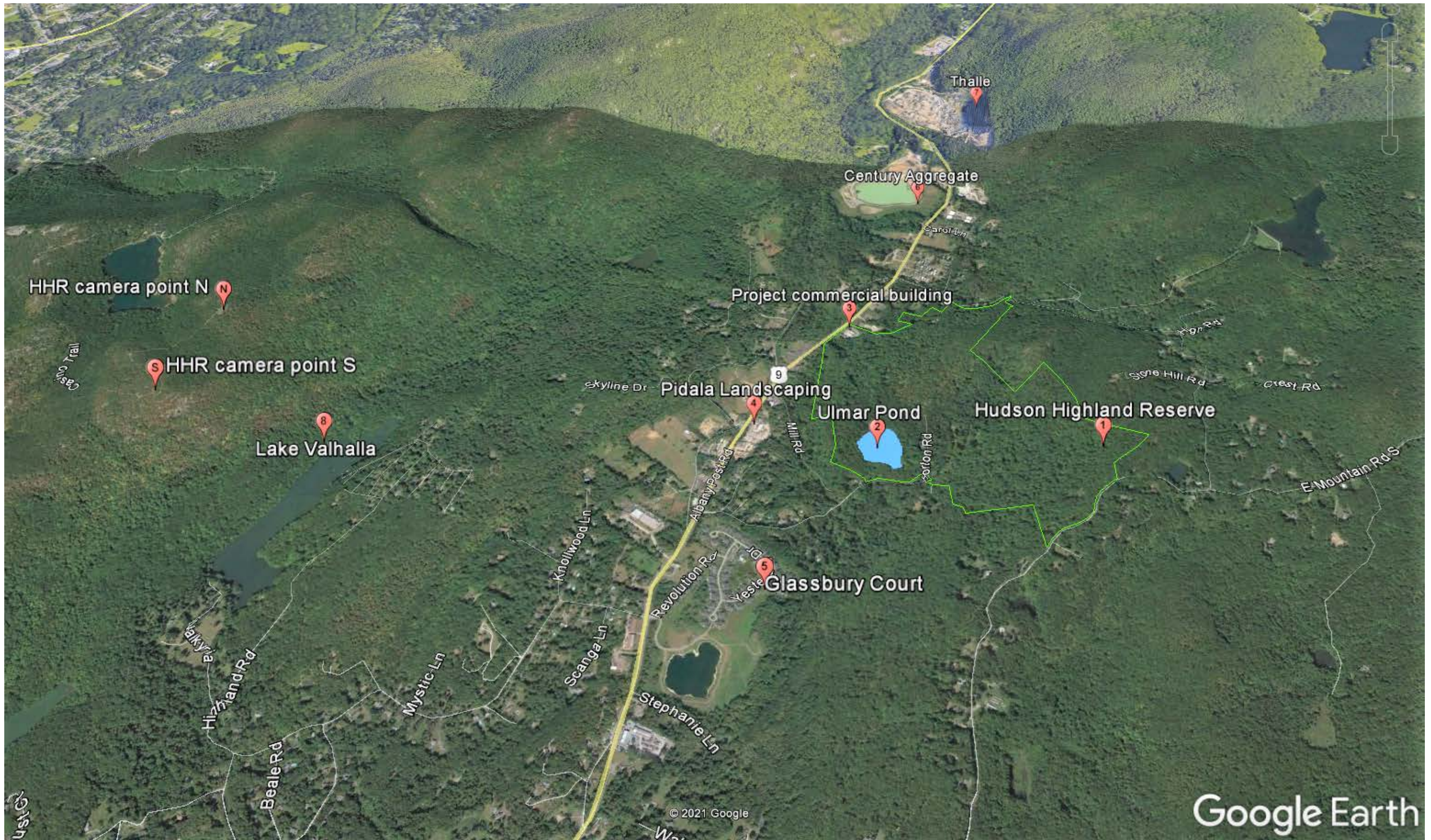
## SCOFIELD RIDGE

prepared by:

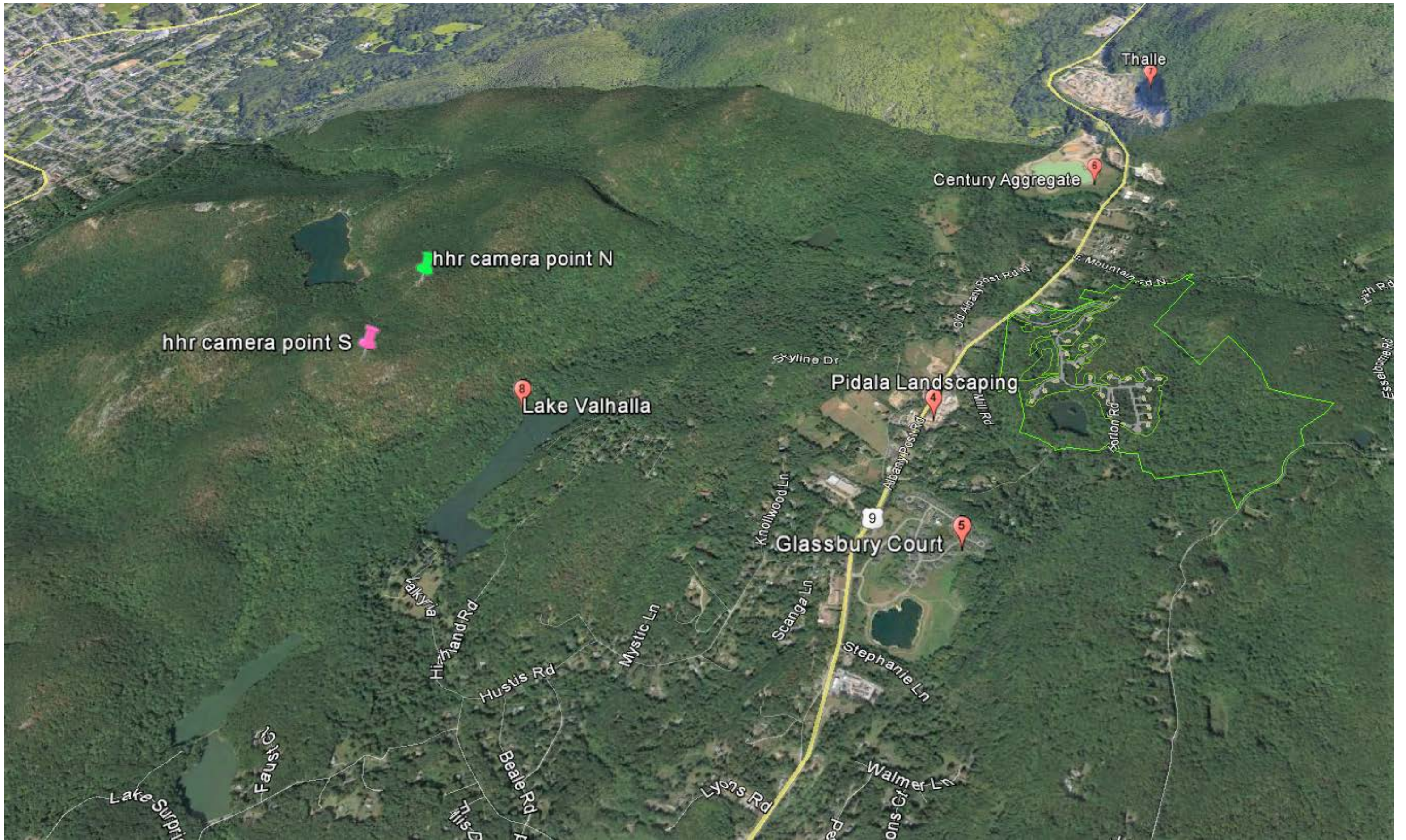


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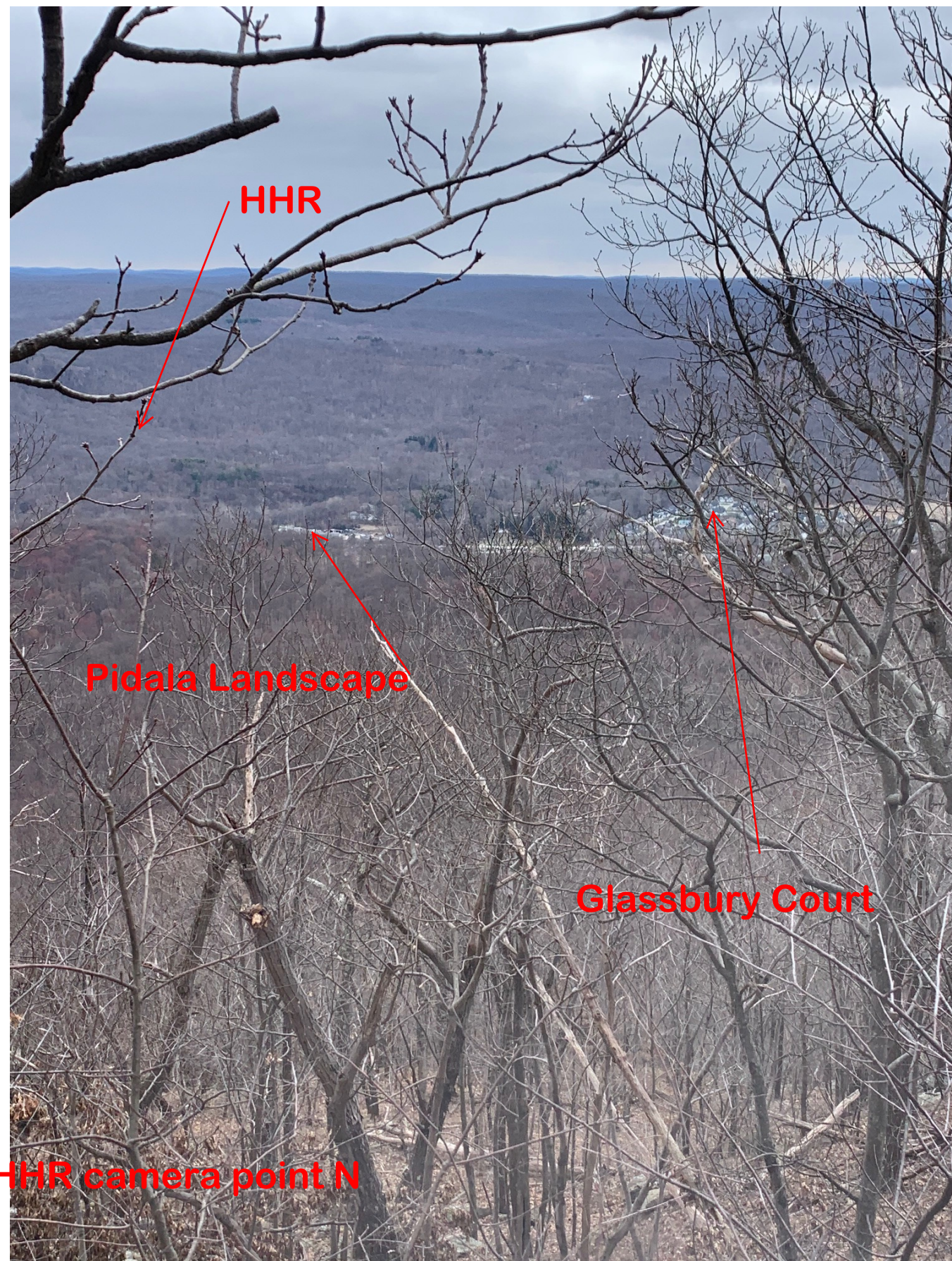
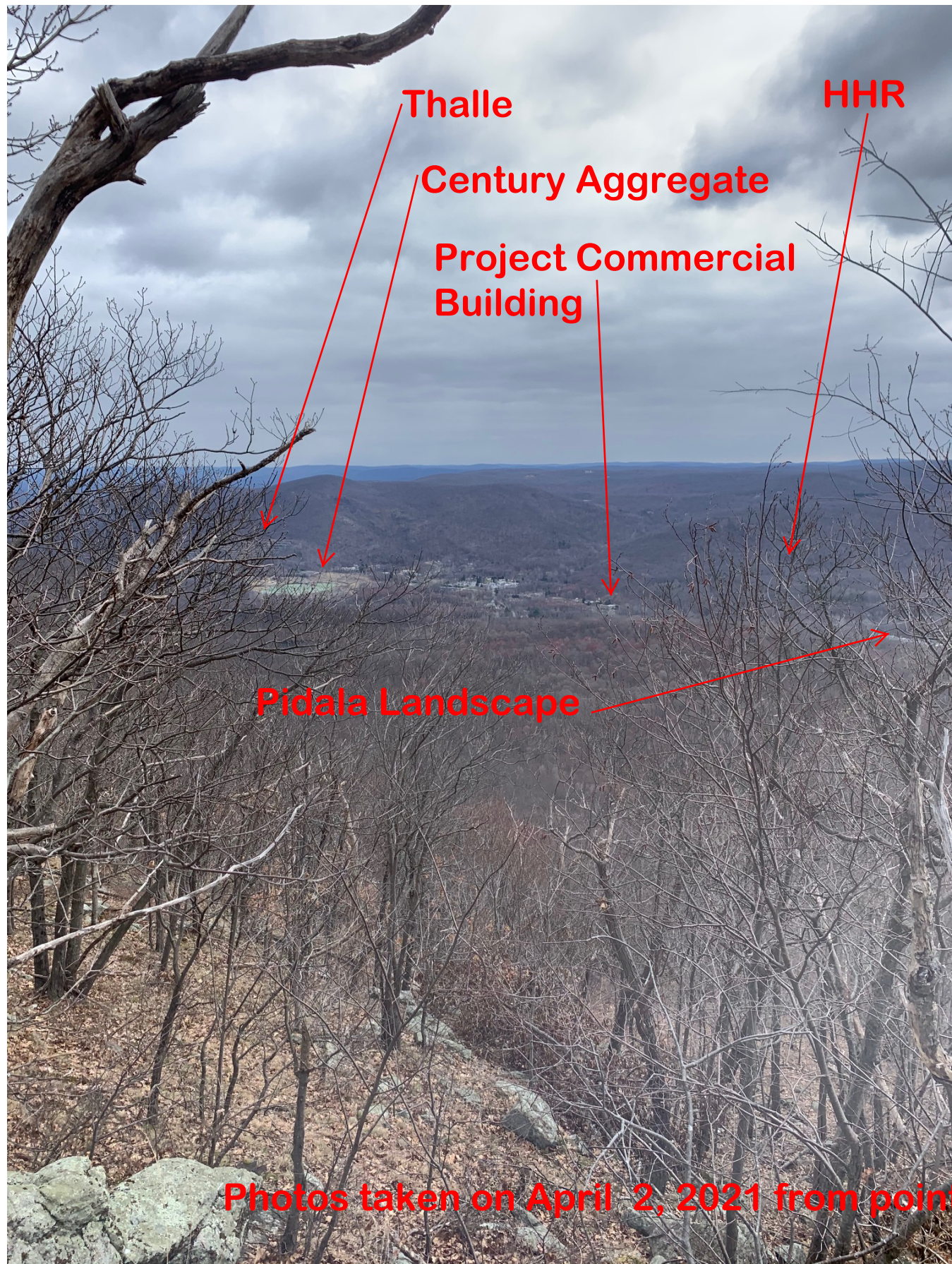






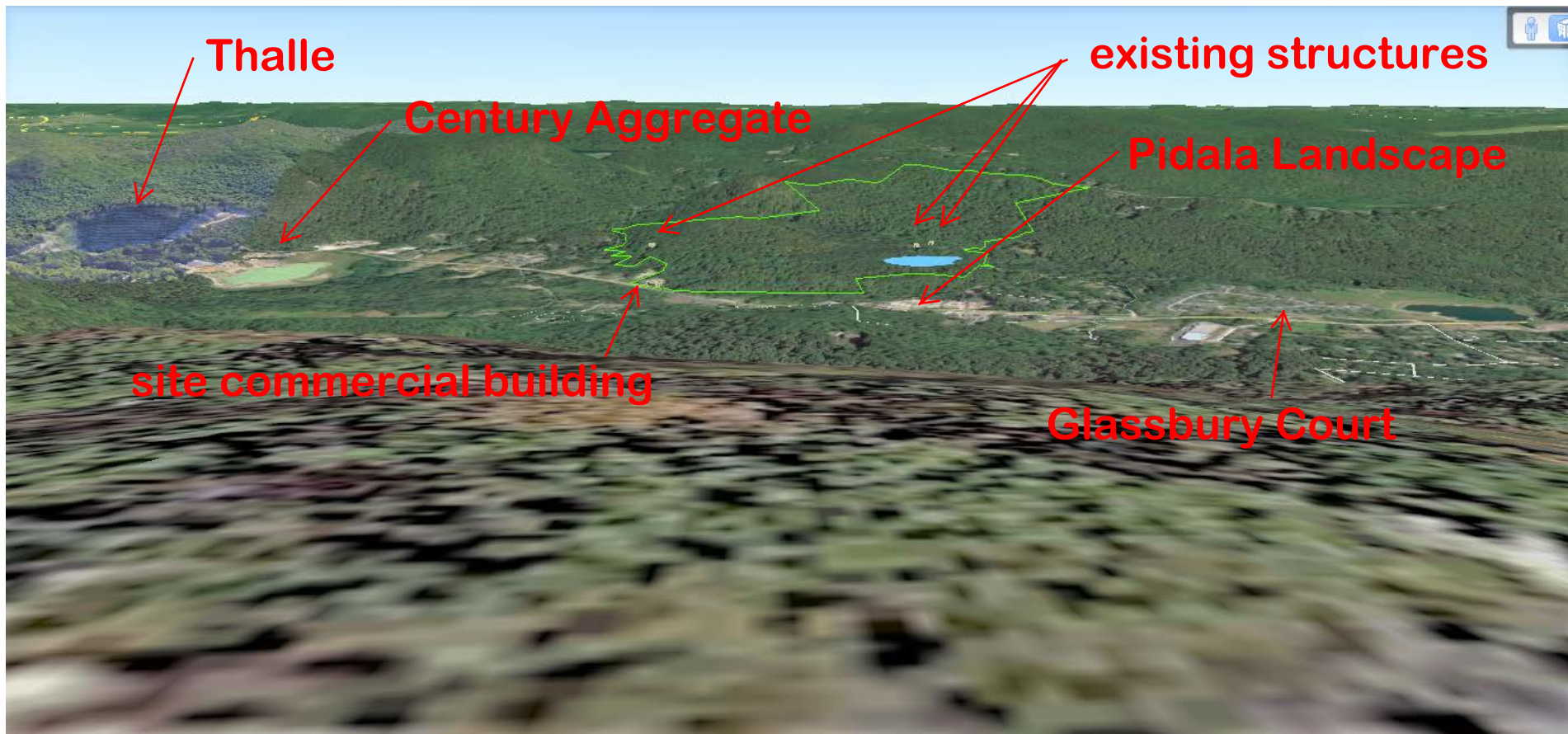






Photos taken on April 2, 2021 from point labeled HHR camera point N





Google Earth screenshot from "HHR camera point N"  
 Added to the screenshot:

- HHR's existing two houses and barn (3D)
- HHR property line
- Ulmar Pond in blue

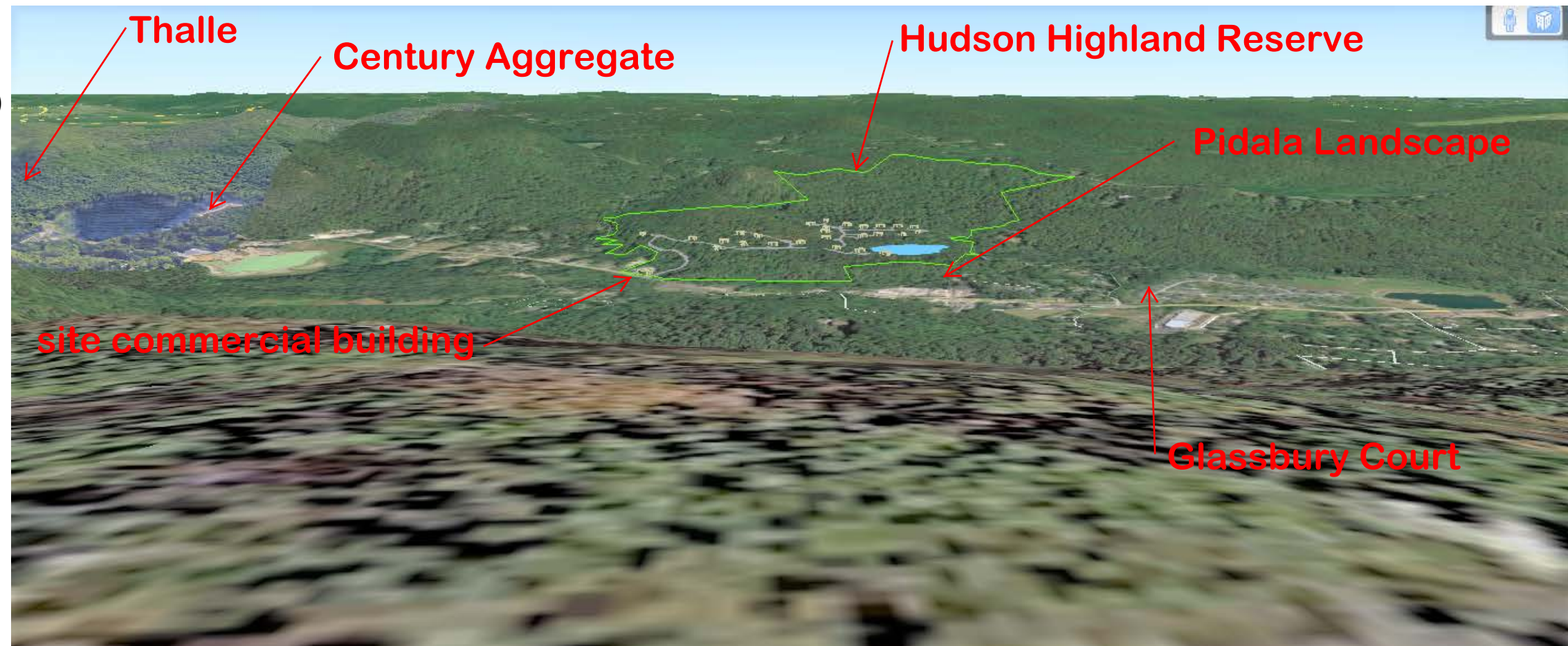
These items were added to assist users' visualization. The existing vegetation appears at ground level and simulates bare earth. As shown on the previous page, these items are not visible from Scofield Ridge because of the surrounding forest.

Google Earth screenshot from "HHR camera point N"

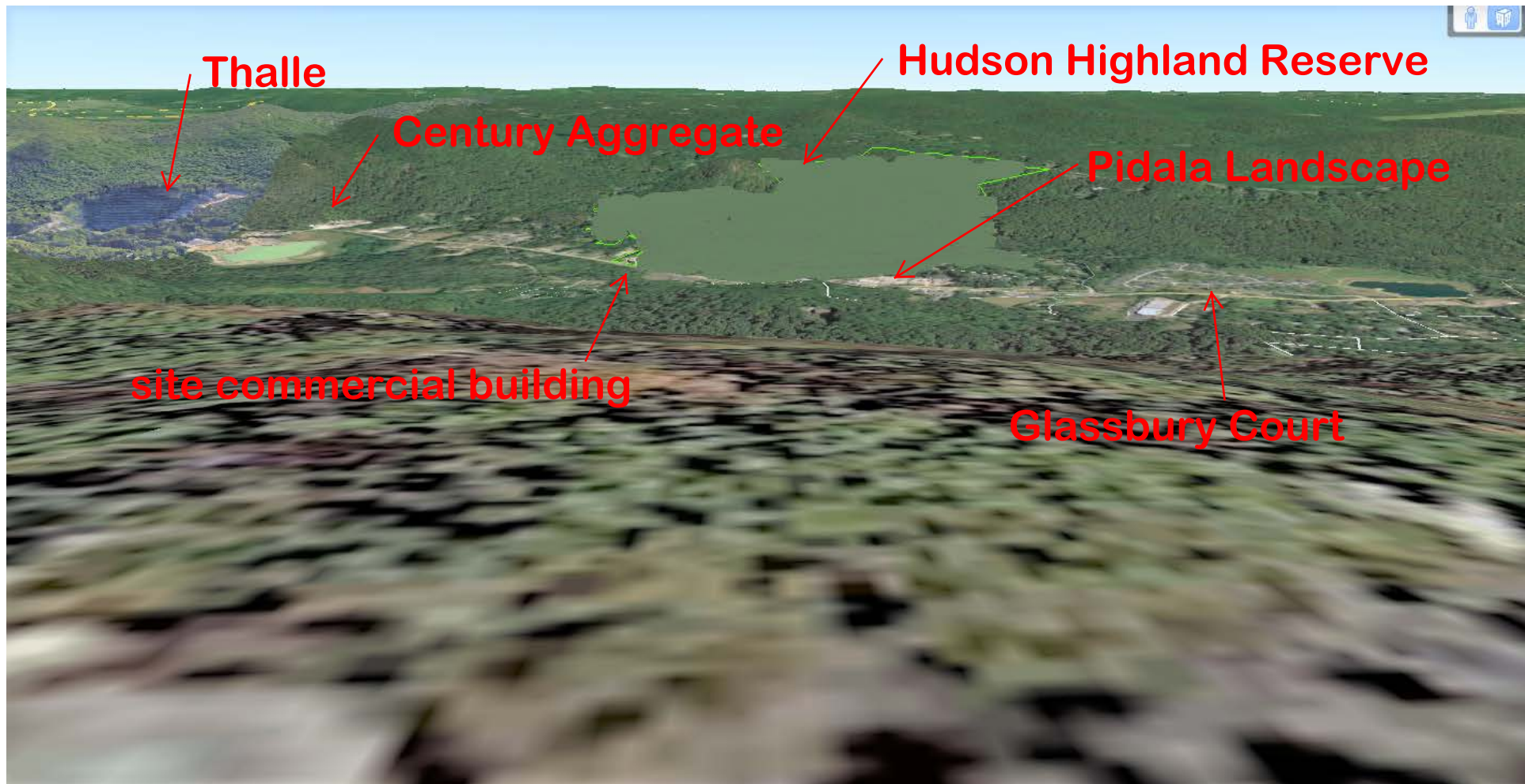
Added to the screenshot:

- HHR's existing two houses and barn (3D)
- HHR property line
- Ulmar Pond in blue
- HHR's features, proposed roads, houses (3D), and driveways

These items were added to assist users' visualization. The existing vegetation appears at ground level and simulates bare earth. As shown on the previous page, these items are not visible from Scofield Ridge because of the surrounding forest.







Google Earth screenshot from "HHR camera point N"

Added to the screenshot:

- HHR's existing two houses and barn (3D)
- HHR property line
- Ulmar Pond in blue
- HHR's features, proposed roads, houses (3D), and driveways
- AND EXISTING TREES in 3D depicting tree top level

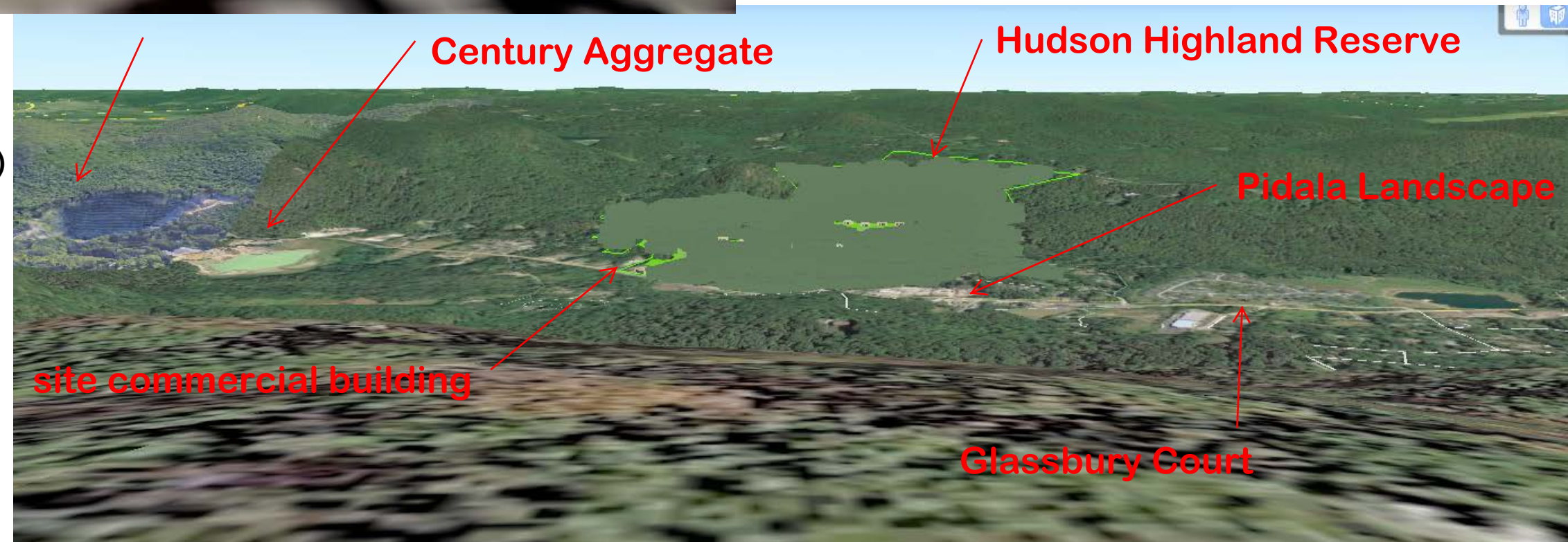
When the existing tree cover, as shown on this image, is added, the features visible on the previous page are concealed.

Google Earth screenshot from "HHR camera point N"

Added to the screenshot:

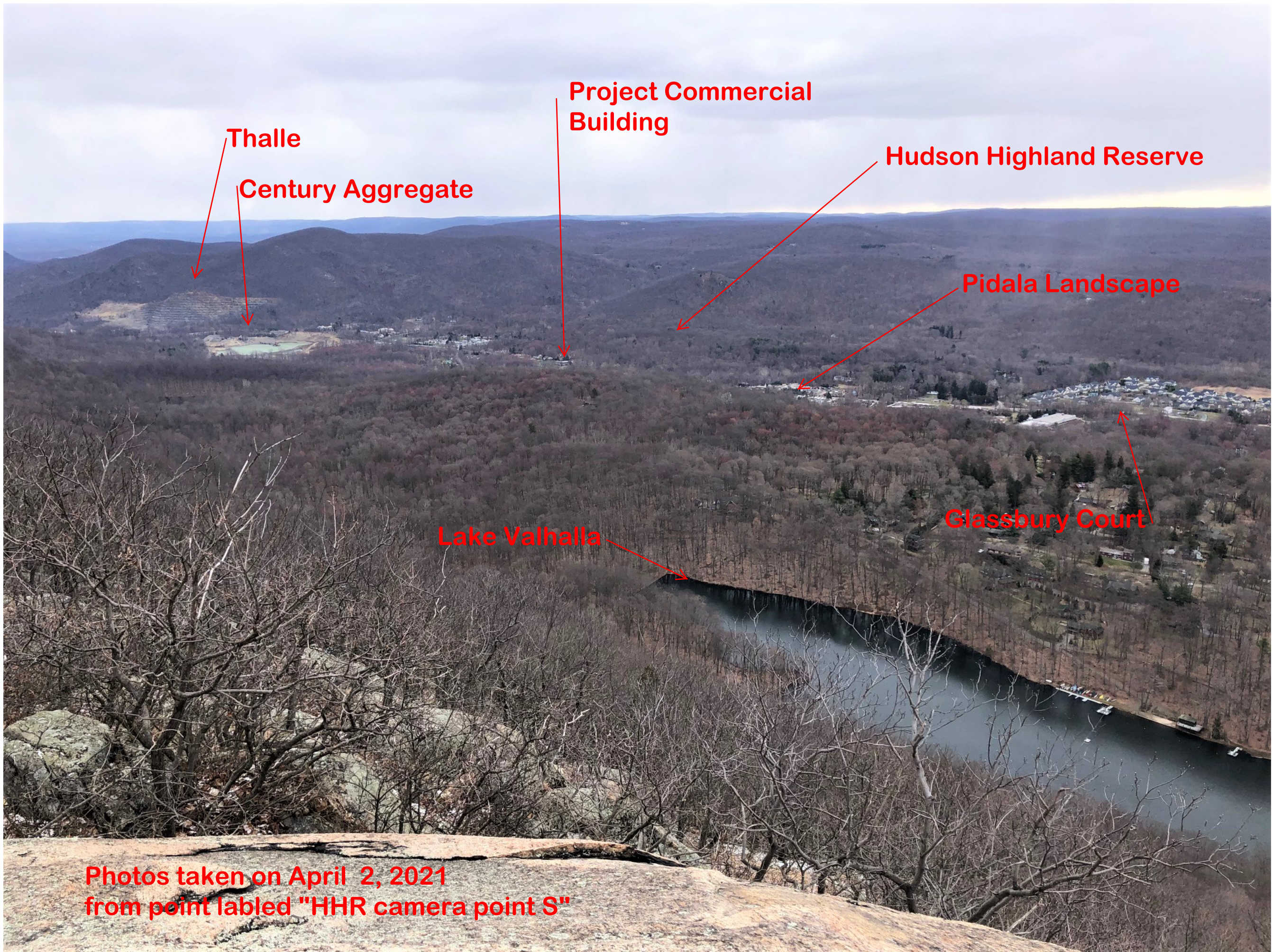
- HHR's existing two houses and barn (3D)
- HHR property line
- Ulmar Pond in blue
- HHR's features, proposed roads, houses (3D), and driveways
- AND EXISTING TREES in 3D depicting tree top level

**TREES REMOVED FROM AREAS OF DISTURBANCE**



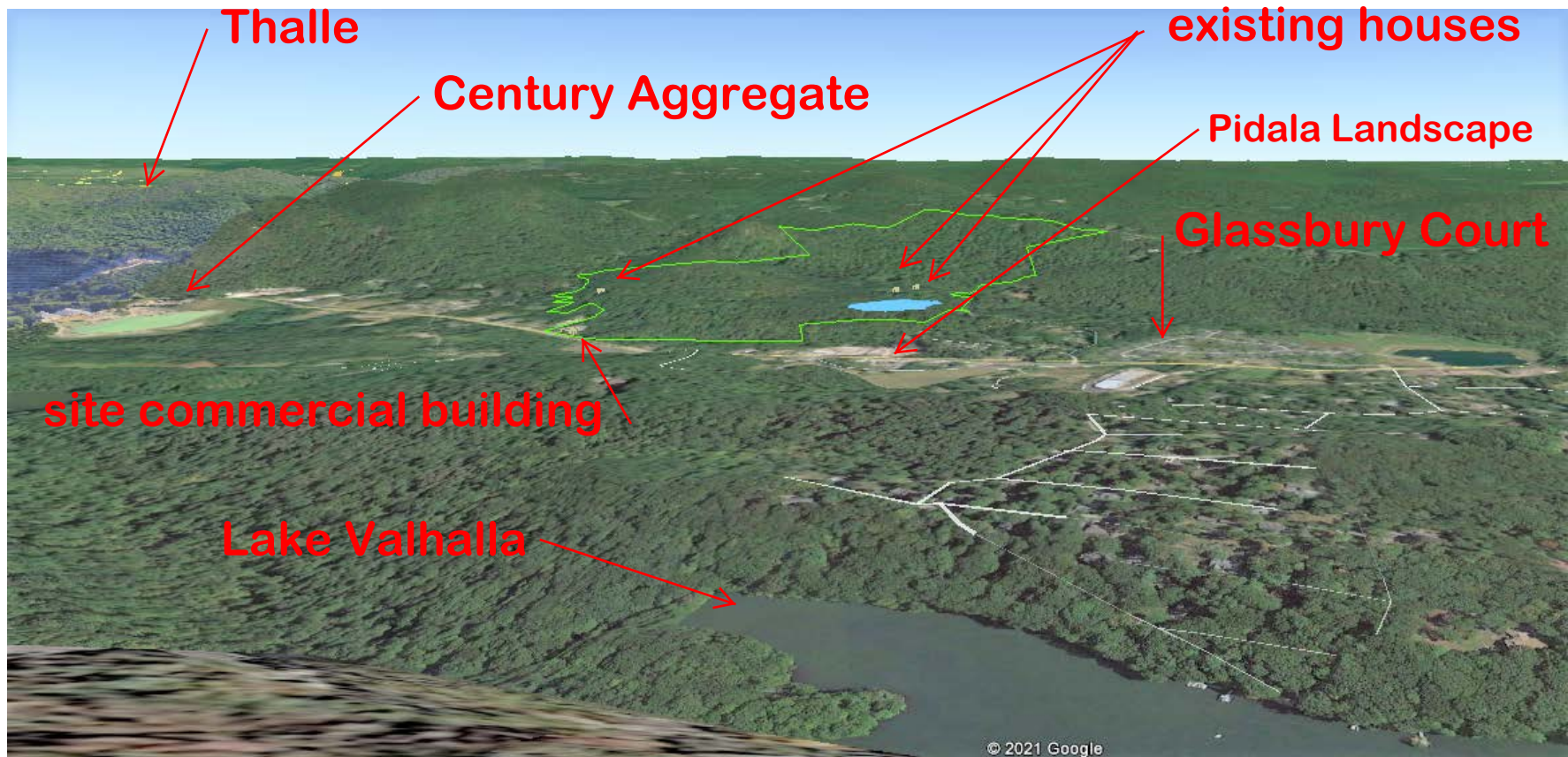
When 3D trees are eliminated from within the limit of disturbance, it becomes apparent that the entry road will be visible, as will parts of the houses on lots 3 & 5, Lot 23 and Lots 15 thru 18. Visibility along the entry road can be mitigated with the installation of street trees. Visibility in the vicinity of Lots is relatively minor and not dissimilar to other developed areas that dapple the hillside.





Photos taken on April 2, 2021  
from point labeled "HHR camera point S"





Google Earth screenshot from "HHR camera point S"  
 Added to the screenshot:

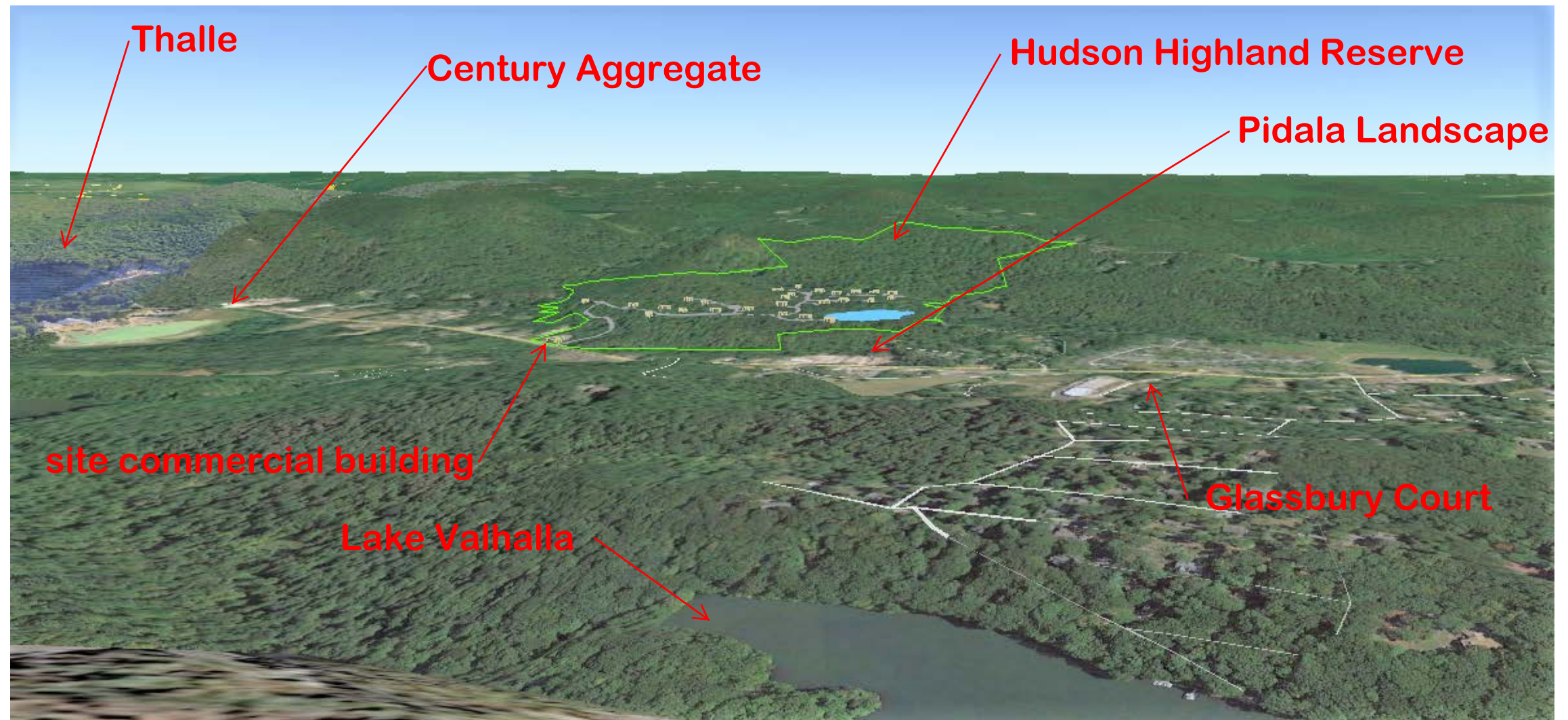
- HHR's existing two houses, existing barn (3D)
- HHR property line
- Ulmar Pond in blue

These items were added to assist users' visualization. The existing vegetation appears at ground level and simulates bare earth. As shown on the previous page, these items are not visible from Scofield Ridge because of the surrounding forest.

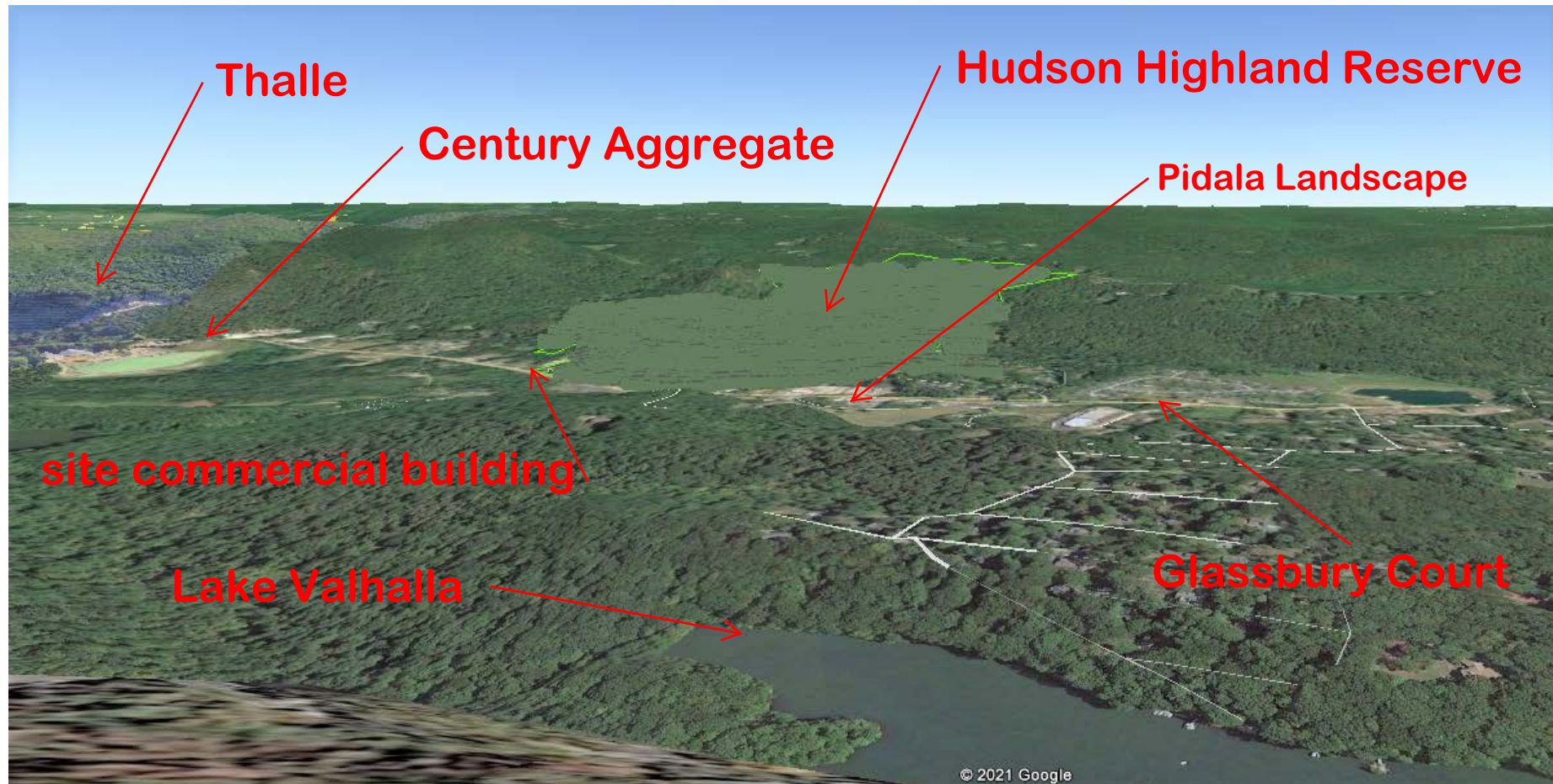
Google Earth screenshot from "HHR camera point S"  
 Added to the screenshot:

- HHR's existing two houses and barn (3D)
- HHR property line
- Ulmar Pond in blue
- HHR's features, proposed roads, houses (3D), and driveways

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Google Earth screenshot from "HHR camera point S"  
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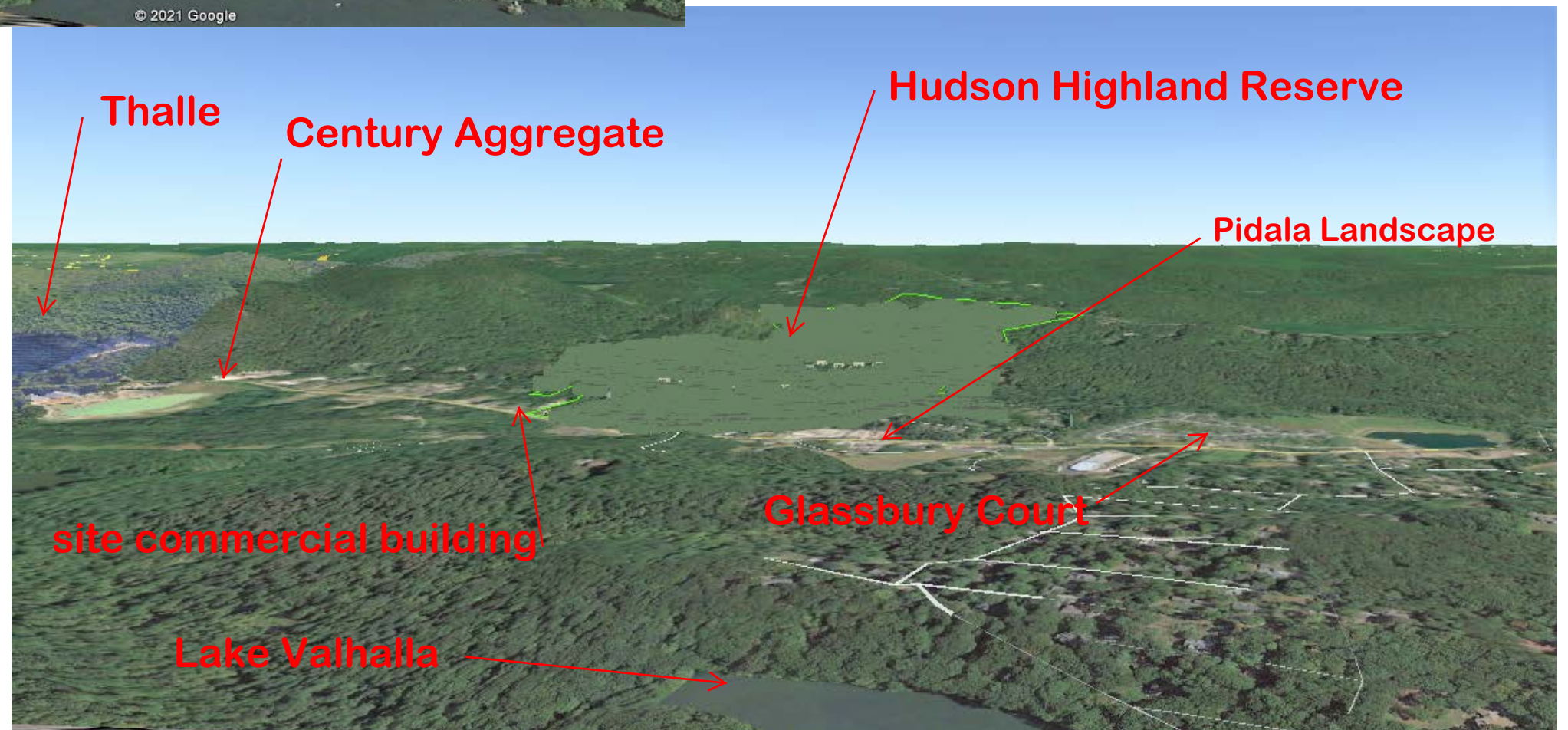
- HHR's existing two houses and barn (3D)
- HHR property line
- Ulmar Pond in blue
- HHR's features, proposed roads, houses (3D), and driveways
- AND EXISTING TREES in 3D depicting tree top level

When the existing tree cover, as shown on this image, is added, the features visible on the previous page are concealed.

Google Earth screenshot from "HHR camera point S"  
 Added to the screenshot:

- HHR's existing two houses, existing barn (3D)
- HHR property line
- Ulmar Pond in blue
- HHR features, proposed roads, 0houses (3D), and driveways

**TREES REMOVED FROM AREAS OF DISTURBANCE**



When 3D trees are eliminated from within the limit of disturbance, it becomes apparent that the entry road will be visible, as will parts of the houses on lots 3 & 5, Lot 23 and Lots 15 thru 18. Visibility along the entry road can be mitigated with the installation of street trees. Visibility in the vicinity of Lots is relatively minor and not dissimilar to other developed areas that dapple the hillside.

## **APPENDIX F**

REAL ESTATE COMPARATIVE ANALYSIS,  
WATERFRONT, VS NON-WATERFRONT PROPERTIES

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April 16<sup>th</sup>, 2021

Dear Sirs,

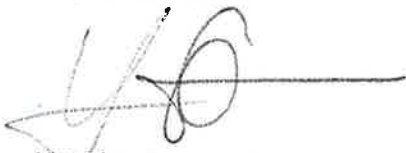
It is a known fact and proven determination in the Real Estate industry that Properties that have water views, water access or are located at water's edge sell at a premium of between 40% -50% compared to homes located inland.

Average Sales Price of Waterfront:	\$ 1,506,166.67
Average Sales Price of Non- Waterfront:	\$606,333.33
Loss Percentage:	<b>40%</b>
Average price per square foot of Waterfront:	\$474
Average price per square foot of Non-Waterfront:	\$208
Loss Percentage:	<b>44%</b>

In researching comparables this has been a proven trend.

Feel free to contact me if you have questions.

With best Regards



Yasmine Guenancia

NYS LIC. Real Estate Salesperson

The Patty Larocco Team

Douglas Elliman Real Estate

Cell: 914-671-7725

Yasmine.guenancia@elliman.com

## Waterfront

Year Built	Status	Address	Sale Price	Beds	Bath	Garage	Pool	Suare foot	Price/sq ft	Lot size	Water
1972	For Sale	40 Hidden Hollow Ln, Millwood, NY 10546	\$ 1,188,000.00	4	4	2	N	3,519	\$338	0.56	Pond
1988	For Sale	30 Indian Brook Rd, Garrison, NY 10524	\$ 1,295,000.00	3	4	0	N	2,142	\$341	3.96	Creek
1942	Sold - 2017	124 Elm Rd, Briarcliff Manor, NY 10510	\$ 1,495,000.00	4	3	2	N	4,249	\$352	1.00	Pond
1890	Sold - 2015	25 W Lake Stable Rd, Tuxedo Park, NY 10987	\$ 1,475,000.00	5	4	0	N	3,572	\$413	0.33	Pond
1947	Sold - 2013	420 Indian Brook Rd, Garrison, NY 10524	\$ 907,500.00	4	3	0	N	2,042	\$444	2.94	Pond
1950	Sold - 2020	4 Bittersweet Ln, Mount Kisco, NY 10549	\$ 1,850,000.00	4	6	0	N	4,129	\$448	2.89	Pond
2010	For Sale	6 Oriole Dr, Sherman, CT 06784	\$ 1,400,000.00	3	4	2	N	2,932	\$477	0.97	Pond
1880	For Sale	262 Route 308, Rhinebeck, NY 12572	\$ 1,995,000.00	5	4	3	Y	2,836	\$703	4.12	Creek
1950	For Sale	8 Cat Briar Rd, Carmel, NY 10512	\$ 1,950,000.00	3	5	1	Y	2,609	\$747	1.35	Pond

## Non Waterfront

Year Built	Status	Address	Sale Price	Beds	Bath	Garage	Pool	Suare foot	Price/sq ft	Lot size
1980	For Sale	1738 Route 52, Fishkill, NY 12524	\$ 579,000.00	5	3	2	Y	4,300	\$135	1.80
2020	For Sale	7 Stable View Ln, Brewster, NY 10509	\$ 649,000.00	3	3	2	Community	2,200	\$281	0.41
1987	For Sale	211 Church Rd, Putnam Valley, NY 10579	\$ 500,000.00	3	3	1	N	2,800	\$179	1.10
1949	For Sale	62 Ondaora Pkwy, Highland Falls, NY 10928	\$ 650,000.00	5	2	2	N	4,052	\$160	0.53
1990	For Sale	11 Miller Rd, Putnam Valley, NY 10579	\$ 700,000.00	4	3	2	Y	3,260	\$215	1.20
1968	For Sale	14 Pouting Rock Rd, Mahopac, NY 10541	\$ 575,000.00	5	3	0	N	2,668	\$216	0.45
2020	For Sale	658 Glasco Tpke, Saugerties, NY 12477	\$ 625,000.00	4	2	0	N	2,700	\$231	2.00
2021	New Construction	400 S Ohioville Rd, New Paltz, NY 12561	\$ 549,000.00	3	4	2	N	2,502	\$219	0.43
2015	For Sale	9 Pioneer Dr, Copake, NY 12516	\$ 630,000.00	4	4	0	Y	2,634	\$239	2.00

### Loss Factor Calculation

Average Sales Price of Waterfront:	\$ 1,506,166.67
Average Sales Price of Non- Waterfront:	\$ 606,333.33
Loss Percentage:	<b>40%</b>

Average price per square foot of Waterfront:	\$474
Average price per square foot of Non-Waterfront:	\$208
Loss Percentage:	<b>44%</b>

## **APPENDIX G**

Additional References Supplementing  
the 1998 Lathrop Paper

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## **Additional References Supplementing the 1998 Lathrop Paper**

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## **APPENDIX H**

# Preliminary Stormwater Pollution Plan

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Preliminary Stormwater Pollution Prevention Plan

# HUDSON HIGHLANDS RESERVE

Route 9  
Town of Philipstown  
Putnam County, New York

March 9, 2018  
November 30, 2021 Rev1



**Badey & Watson**  
Surveying & Engineering, P.C.  
3063 Route 9  
Cold Spring, New York 10512  
845-265-9217

Prepared for:  
Horton Road, LLC.  
516 East 89th Street  
New York, NY 10128  
Contact: Mr. Ulises Liceaga  
(212) 722-0170



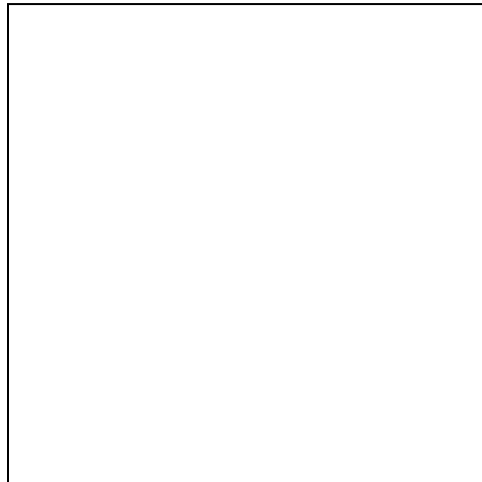
## PREPARER OF THE SWPPP

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person(s) who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that false statements made herein are punishable as a Class A misdemeanor pursuant to Section 29.45 of the Penal Law."

Name<sup>1</sup>: Margaret Smith McManus, PE

Title: Senior Project Manager

Date:



---

<sup>1</sup> This is a signature of a New York State licensed Professional Engineer employed by The Badey & Watson that is duly authorized to sign and seal Stormwater Pollution Prevention Plans (SWPPPs), NOIs, and NOTs prepared under their direct supervision.

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## 1.0 EXECUTIVE SUMMARY

This Stormwater Pollution Prevention Plan (SWPPP) has been prepared for major activities associated with construction of a 25 lot subdivision of single family homes. The Property is located on Route 9 between East Mt Road North, Horton Road and East Mt Road South in the Town of Philipstown. This SWPPP includes the elements necessary to comply with the national baseline general permit for construction activities enacted by the U.S. Environmental Protection Agency (EPA) under the National Pollutant Discharge Elimination System (NPDES) program and all local governing agency requirements. This SWPPP must be implemented at the start of construction.

This SWPPP has been developed in accordance with the “New York State Department of Environmental Conservation (NYSDEC) State Pollution Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity” General Permit Number GP-0-20-001, effective January 29, 2020 through January 28, 2025. The SWPPP and accompanying plans identify and detail stormwater management, pollution prevention, and erosion and sediment control measures necessary during and following completion of construction.

This SWPPP and the accompanying plans entitled Conservation Subdivision Plan Set Hudson Highland Reserve.... have been submitted as a set. These engineering drawings are considered an integral part of this SWPPP. Therefore, this SWPPP is not considered complete without them. References made herein to “the plans” or to a specific “sheet” refer to these drawings.

This report considers the impacts associated with the intended development with the purpose of:

1. Maintaining existing drainage patterns as much as possible while continuing the conveyance of upland watershed runoff;
2. Controlling increases in the rate of stormwater runoff resulting from the proposed development so as not to adversely alter downstream conditions; and
3. Mitigating potential stormwater quality impacts and preventing soil erosion and sedimentation resulting from stormwater runoff generated both during and after construction.

The analysis and design completed and documented in this report is intended to be part of the application made for a residential development project completed on behalf of Horton Road LLC.

This Preliminary Stormwater Pollution Prevention Plan (SWPPP) has been prepared to support the state environmental quality review (SEQR) of the proposed project. The intent of this Preliminary SWPPP is to provide sufficient documentation for an overall SEQR determination, and to serve as the baseline for the final SWPPP that will be prepared for the proposed development, as approved. As such, design concepts are provided for stormwater collection and conveyance systems, and water quality and quantity control facilities. This report is not intended to be a final engineering document as certain detailed aspects of the project are likely to change during the site plan review process. Portions of the design were advanced to substantiate regulatory compliance determinations and to provide input pertinent to the environmental assessment of impacts of the proposed project. Final stormwater facility designs will be advanced in support of and during the site plan permitting process.

The methodology used to develop this Preliminary SWPPP shall be adhered to for the preparation of the project's final SWPPP. Stormwater quality and quantity controls designed for this Preliminary SWPPP are preliminary in nature and are intended to demonstrate their location, approximate size, and design concept. Detailed analysis of these practices must be performed, and their design refined as part of the final SWPPP.

The stormwater analysis identified herein follows *the "NYS Stormwater Management Design Manual," dated January 2015 (Design Manual) and the USDA Technical Release No. 20*. This Preliminary SWPPP and analysis are an integral part of the project's natural resource management plan which takes into consideration existing parameters of site topography, soils, erosion potential, surface waters, their connectivity and water quality of receiving water bodies.

Stormwater mitigation measures primarily involve preventing soil erosion and sedimentation resulting from stormwater run-off during and after construction. During construction, this is accomplished by sequencing site disturbance activities to establish erosion controls, minimize disturbed areas, maintain existing vegetation as much as possible, and stabilize newly disturbed areas as soon as possible. Stormwater pollutant controls utilized during construction will include temporary sediment barriers and sediment traps designed in accordance with the *"NYS Standards and Specifications for Erosion and Sediment Control"*. Stormwater pollutant controls utilized after construction will include stormwater quality control facilities designed in accordance with the Manual.

Land development can also have an effect on site hydrology. Impervious areas such as rooftops, roads, driveways, and parking lots can cause rainfall to rapidly convert into stormwater runoff. Increases in runoff can cause stream bank erosion and floodplain expansion. To mitigate these impacts, stormwater quantity controls will be implemented to capture and release run-off at less than pre-development discharge rates. A hydrologic and hydraulic analysis was performed using computer modeling and an evaluation of the proposed improvements across the project site.

## 1.1 Project Description

Horton Road LLC is proposing development of a 25-lot conservation subdivision on the 210± acre site. The project site consists of tax lot numbers 17.-1-39 ,48, 76.111, 76.112, 76.21 & 77.2. A location map of the site has been provided in Appendix K, as Figure 1.

This type of project is included in Table 2 of Appendix B of GP-0-20-001; and the project site is not located in one of the watersheds listed in Appendix C of GP-0-20-001. Therefore, this SWPPP includes post-construction stormwater management practices, as well as erosion and sediment controls.

This project is located within the Town of Philipstown a regulated, traditional land use control Municipal Separate Stormwater Sewer System (MS4). Therefore, an MS4 SWPPP Acceptance Form is required to accompany NOIs submitted to the NYSDEC.

Runoff from the project site will discharge to the Ulmar Pond and the Clover Creek which are not included in the list of Section 303(d) water bodies included in Appendix E of GP-0-20-001.

Project construction activities will consist primarily units site grading, paving, building construction, and the installation of storm drainage, water supply, sewage collection, and public utility infrastructure] necessary to support the proposed development. Construction phase pollutant sources anticipated at

the site are disturbed (exposed) soil, vehicle fuels and lubricants, chemicals associated with building construction, and building materials. Without adequate control there is the potential for each type of pollutant to be transported by stormwater.

## 1.2 Stormwater Pollution Controls

The stormwater pollution controls outlined herein have been designed and evaluated in accordance with the following standards and guidelines:

- New York State Stormwater Management Design Manual, dated January 2015 (Design Manual).
- New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016 (SSESC).
- Town of Philipstown Town Code Chapter 147A.

Stormwater quality will be enhanced through the implementation of temporary and permanent erosion and sediment control measures, the proposed stormwater management facilities, and other construction-phase pollution controls outlined herein.

The proposed stormwater collection system consisting of pipes, open drainage ways, and on-site stormwater management facilities will adequately collect, treat, and convey the stormwater runoff.

Bio-retention areas, dry swales, rain gardens and filteria units will be used to manage and treat stormwater runoff generated by the proposed development.

Pre- and post-development surface runoff rates have been evaluated for the 1-, 10-, and 100-year 24-hour storm events of pre- and post-development watershed conditions demonstrates that the peak rate of runoff from the project site will not be increased.

The post-construction stormwater management practice(s) and any right-of-way(s) needed to maintain such practice(s) will be deeded to the municipality in which the practice(s) is located.

The post-construction stormwater management practice(s) will be privately owned by the Hudson Highland Reserve Homeowners Association. Deed restrictions will be in place, which require operation and maintenance of the practice(s) in accordance with the operation and maintenance plan.

## 1.3 Conclusion

This project is subject to the requirements of the Town of Philipstown regulated MS4, and this SWPPP has been prepared in conformance with the current Design Manual and SSESC. As such, GP-0-20-001 coverage will be effective five (5) business days from the date the NYSDEC receives the electronically submitted eNOI and signed "MS4 SWPPP Acceptance" form.

## 2.0 SITE CHARACTERISTICS

### 2.1 Land Use and Topography

The project site is located within the It is located in the RR (Rural Residential), HC (Highway Commercial) and M (Industrial/Manufacturing) zoning districts. Single Family use is allowed in the RR and HC zoning districts. A change of zoning is being sought to change the M zoning district that is location along Route 9 to allow for the inclusion of this area with in the conservation subdivision

The overall site has areas that are slightly, moderately, or extremely sloping, with slopes ranging from 1 greater than 35 percent. Site elevations range from approximately 252 feet above mean sea level (MSL) to 890 feet MSL. The site generally drain from east to west and discharges to Ulmar Pond and Clove Creek.

### 2.2 Soils and Groundwater

The United States Department of Agriculture (USDA) Web Soil Survey (<http://websoilsurvey.nrcs.usda.gov/app/>) was used to obtain surficial soil conditions for the study area. Soil data as provided by the SCS is presented in Table 1.

**Table 1: USDA Soil Data**

Map Symbol & Description	Hydrologic Soil Group	Permeability (inches/hour)	Erosion Factor K	Depth to Water Table (feet)	Depth to Bedrock (inches)
ChB - CHARLTON loam, 2-8% Slopes	B	0.6-6.0	0.24	>6.0	>60
ChC - CHARLTON loam, 8-15% Slopes	B	0.6-6.0	0.24	>6.0	>60
ChD - CHARLTON loam, 15-25% Slopes	B	0.6-6.0	0.24	>6.0	>60
ChE - CHARLTON loam, 25-35% Slopes	B	0.6-6.0	0.24	>6.0	>60
CiC - CHARLTON loam, 8-15% Slopes, very stony	B	0.6-6.0	0.20	>6.0	>60
CiD - CHARLTON loam, 15-25% Slopes, very stony	B	0.6-6.0	0.20	>6.0	>60
CiF - CHARLTON loam, 35-45% Slopes, very stony	B	0.6-6.0	0.20	>6.0	>60
CrC - CHARLTON-CHATFIELD complex, rolling, very rocky	B	0.6-6.0	0.24	>6.0	>60
CsD - CHATFIELD-CHARLTON complex, hilly, very rocky	B	0.6-6.0	0.24	>6.0	>60
Ff - FLUVAQUENTS-UDIFLUVENTS complex, frequently flooded	B\D	0.2-20	0.32	0.5-6.0	>40

Map Symbol & Description	Hydrologic Soil Group	Permeability (inches/hour)	Erosion Factor K	Depth to Water Table (feet)	Depth to Bedrock (inches)
Fr - FREDON silt loam	C	0.6-2.0	0.28	0.5-1.5	>60
HnB - HINCKLEY gravelly loamy sand, 3-8% Slopes	A	6.0-20	0.17	>6.0	>60
HnC - HINCKLEY gravelly loamy sand, 8-15% Slopes	A	6.0-20	0.17	>6.0	>60
HnD - HINCKLEY gravelly loamy sand, 15-25% Slopes	A	6.0-20	0.17	>6.0	>60
LeB - LEICESTER loam, 2-8% Slopes, very stony	C	0.6-6.0	0.24	1.5	>60
PnB - PAXTON fine sandy loam, 2-8% Slopes	C	0.6-2.0	0.24	1.5-2.5	>60
PnC - PAXTON fine sandy loam, 8-15% Slopes	C	0.6-2.0	0.24	1.5-2.5	>60
PnD - PAXTON fine sandy loam, 15-25% Slopes	C	0.6-2.0	0.24	1.5-2.5	>60
Pt - PITS, gravel	-	-	-	-	-
RhA - RIVERHEAD loam, 0-3% Slopes	B	2.0-6.0	0.28	>6.0	>60
RhB - RIVERHEAD loam, 3-8% Slopes	B	2.0-6.0	0.28	>6.0	>60
RhC - RIVERHEAD loam, 8-15% Slopes	B	2.0-6.0	0.28	>6.0	>60
RhD - RIVERHEAD loam, 15-25% Slopes	B	2.0-6.0	0.28	>6.0	>60
RhE - RIVERHEAD loam, 25-50% Slopes	B	2.0-6.0	0.28	>6.0	>60
Sh - SUN loam	D	0.6-2.0	0.28	+1.0-0.5	>60
Ub - UDORTHENTS, smoothed	-	-	-	-	-
Uc - UDORTHENTS, wet substratum	-	-	-	-	-
Uf - URBAN LAND	-	-	-	>2.0	>10
WdB - WOODBRIDGE loam, 3-8% Slopes	C	0.6-2.0	0.24	1.5-2.5	>60
WdC - WOODBRIDGE loam, 8-15% Slopes	C	0.6-2.0	0.24	1.5-2.5	>60
W – Water	-	-	-	-	-

Upon review of the soil data presented in Table 1, the project site contains soils with a soil slope phase of E or F but is not tributary to a class AA or AA-S waters.

The Soil Conservation Service defines the hydrologic soil groups as follows:

- **Type A Soils:** Soils having a high infiltration rate and low runoff potential when thoroughly wet. These soils consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a moderate rate of water transmission.
- **Type B Soils:** Soils having a moderate infiltration rate when thoroughly wet and consisting mainly of moderately deep to deep, moderately well to well drained soils with moderately fine to moderately coarse textures. These soils have a moderate rate of water transmission.
- **Type C Soils:** Soils having a low infiltration rate when thoroughly wet and consisting chiefly of soils with a layer that impedes downward movement of water and soils with moderately fine-to-fine texture. These soils have a low rate of water transmission.
- **Type D Soils:** Soils having a very low infiltration rate and high runoff potential when thoroughly wet. These soils consist chiefly of clays that have high shrink-swell potential, soils that have a permanent high water table, soils that have a clay pan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very low rate of water transmission.

The soils map for the study area is presented in Appendix K, as Figure 2.

## 2.3 Watershed Designation

The project site is not located in a restricted watershed identified in Appendix C of GP-0-20-001.

## 2.4 Receiving Water Bodies

The nearest natural classified water bodies into which runoff from the project site will discharge are Ulmar Pond and the Clove Creek, each are classified by NYSDEC as a Class C (TS) and are not included in the Section 303(d) list of impaired waters found in Appendix E of GP-0-20-001.

## 2.5 Aquifer Designation

The project site is located over the Clover Creek aquifer, the NYSDEC identifies this as a Principal aquifer.

This aquifer is tributary to the Sprout Creek - Fishkill which is listed as a primary supply aquifer in the NYSDEC Technical and Operational Guidance Series (TOGS) 2.1.3 (1980), Primary and Principle Aquifer Determinations, Table 1, 1990; and in the Atlas of Eleven Selected Aquifers in New York, U.S. Geological Survey in cooperation with the NYS Department of Health, 1982.

## 2.6 Wetlands

Wetlands depicted on the accompanying plan set were delineated by Steven W. Colman on July 3, 2014, then updated by Stephen M. Gross in July 2015. And intermittent drainage way was delineated by Stephen M. Gross in July of 2015. The wetland boundary were surveyed by Badey & Watson, during July August and September 2015.

Some of the wetlands on the site are NYSDEC wetlands and will need to be verified by the NYSDEC. It is not anticipated that there is disturbance in the wetland. There is anticipated disturbance in the wetland buffer to remove two existing structure that are in disrepair.

## 2.7 Flood Plains

According to the National Flood Insurance Program Flood Insurance Rate Map (FIRM), Town of Philipstown, New York, Community Panel Number 36079C0081E, the majority of the project site lies within Flood Zone X, areas determined to be out outside the 0.2% annual chance floodplain, with a portion of the site along Clove Creek in Flood Zone AE, a special flood hazard area subject to inundation by the 1% annual chance flood (100 year flood) where the base flood elevation has been determined. No impact is proposed in the 100 year flood area.

## 2.8 Listed, Endangered, or Threatened Species

An ecological assessment was conducted as part of the DEIS study as prepared by Hudson Highlands Environmental Consulting, dated May 16, 2019, indicates that the project will not have a significant adverse impact on any listed, endangered, or threatened species, or on any critical habitat.

## 2.9 Historic Places

The existing 19<sup>th</sup> century barn is deemed to be historically significant by SHPO and is being preserved as part of the project. See the attached correspondence from NYS, Parks, Recreation, and Historic preservation, division of historic Preservation dated may 23, 2017, in Appendix K.

## 2.10 Rainfall Data

The most up-to-date data available online at <http://precip.eas.cornell.edu> was used for the 1, 10 and 100 year 24 hour storm events as presented in Table 2:

**Table 2: Rainfall Data**

<b>Storm Event Return Period</b>	<b>24-Hour Rainfall (inches)</b>
1-year	2.66
10-year	4.82
100-year	8.59

These values were used to evaluate the pre- and post-development stormwater runoff characteristics.



### 3.0 STORMWATER MANAGEMENT PLANNING

Chapter 3 of the Design Manual outlines a six-step planning process for site planning and selection of stormwater management practices that must be implemented for both new development and redevelopment projects. This process is intended to develop a design that maintains pre-construction hydrologic conditions through the application of environmentally sound development principles, as well as treatment and control of runoff discharges from the site. The following sections outline the step-by-step process and how it has been applied to this project.

The goals of this Stormwater Management Plan are to analyze the peak rate of runoff under pre- and post-development conditions, to maintain the pre-development rate of runoff in order to minimize impacts to adjacent or downstream properties, and to minimize the impact to the quality of runoff exiting the site.

The Design Manual provides both water quality and water quantity objectives to be met by projects requiring a “Full SWPPP”. These objectives will be met by applying stormwater control practices to limit peak runoff rates and improve the quality of runoff leaving the developed site.

#### 3.1 Step 1 – Site Planning

During the Site Planning process, the project site is evaluated for implementation of the green infrastructure planning measures identified in Table 3.1 of the Design Manual, in order to preserve natural resources and reduce impervious cover. Table A of Appendix K provides a description of each green infrastructure planning measure, along with a project specific evaluation.

#### 3.2 Step 2 - Determine Water Quality Treatment Volume (WQv)

Stormwater runoff from impervious surfaces is recognized as a significant contributor of pollution that can adversely affect the quality of receiving water bodies. Therefore, treatment of stormwater runoff is important since most runoff related water quality contaminants are transported from land, particularly the impervious surfaces, during the initial stages of storm events.

##### 3.2.1 NYSDEC Requirements for New Development

The Design Manual requires that water quality treatment be provided for the initial flush of runoff from every storm. The NYSDEC refers to the amount of runoff to be treated as the “Water Quality Volume” (WQv). Section 4.2 of the Design Manual defines the Water Quality Volume as follows:

$$WQv = \frac{[(P)(R_v)(A)]}{12}$$

Where: P = 90% Rainfall Event Number  
R<sub>v</sub> = 0.05 + 0.009 (I), minimum R<sub>v</sub> = 0.2  
I = Impervious Cover (Percent)  
A = Contributing Area in Acres

This definition ensures that, all other things being equal, the Water Quality Volume will increase along with the impervious cover percentage.

##### 3.2.2 Methodology

The Water Quality Volume equation has been applied to the drainage area tributary to each of the stormwater quality practices proposed for this project. The practices have been sized to accommodate

the Water Quality Volume, as per the performance criteria presented in Chapter 6 of the Design Manual. Water quality volume calculations for each of the proposed practices are presented in Table B of Appendix K.

### 3.3 Step 3 – Apply Runoff Reduction Techniques and Standard SMPs with RRv Capacity to Reduce Total WQv

Land use change and development in the watershed increases the volume of runoff. As such, reductions in the amount of runoff from new development, accomplished through the implementation of a stormwater management plan for the site, will play an important role in the success or failure of the watershed-wide stormwater management plan. Runoff reduction techniques can be applied to manage, reduce, and treat stormwater, while maintaining and restoring natural hydrology through infiltration, evapo-transpiration, and the capture and reuse of stormwater. Volume reduction techniques by themselves typically are not sufficient to provide adequate attenuation of stormwater runoff, but they can decrease the size of the peak runoff rate reduction facilities.

#### 3.3.1 NYSDEC Requirements for New Development

The Design Manual states that runoff reduction shall be achieved through infiltration, groundwater recharge, reuse, recycle, and/or evaporation/evapotranspiration of 100-percent of the post-development water quality volume to replicate pre-development hydrology. Runoff control techniques provide treatment in a distributed manner before runoff reaches the collection system, by maintaining pre-construction infiltration, peak runoff flow, discharge volume, as well as minimizing concentrated flow. This can be accomplished by applying a combination of Runoff Reduction Techniques, standard Stormwater Management Practices (SMPs) with RRv capacity, and good operation and maintenance.

#### 3.3.2 Methodology

In order to reduce the required WQv, a site specific evaluation must be performed to determine the most practical means of reducing runoff volume. The Design Manual strongly encourages implementation of a combination of RR techniques and standard SMPs with RRv capacity. The following Table demonstrates a summary of the RRv practices being applied, and both the water quality and runoff reduction volumes they provide. The RR Technique(s) have been designed in accordance with Chapter 5 of the Design Manual. The standard SMP(s) with RRv capacity have been designed in accordance with Chapter 6 of the Design Manual. Refer to the contract drawings for practice dimensions, material specifications, and installation details. Practice specific calculations are presented in Table E of Appendix C.

**Table 3: Summary of RR Techniques and Standard SMPs with RRv Capacity**

RR Technique or Standard SMP with RRv Capacity	NYSDEC Design Variant	Pretreatment Volume Required (% of WQv)	Pretreatment Volume Provided (CF)	WQv Required (CF)	WQv Provided (CF)	RRv Capacity	RRv Provided (CF)
Conservation of Natural Areas	RR-1	-	-		42,082	100%	
Rain Garden (without	RR-6	-	-		5,426	100%	5,426

underdrains)							
Rain Garden (with underdrains)	RR-6	-	-		3,979	40%	1,592
Bioretention (without underdrain)	F-5	25			37,652	100%	37,652
<b>Total WQv Provided (CF)</b>							<b>89,139</b>
<b>Total RRv Provided (CF)</b>							<b>44,670</b>

### 3.3.3 Application of Standard Stormwater Management Practices (SMPs) with RRv Capacity

The standard SMPs with RRv capacity, described in the following section, have been incorporated into the stormwater management plan for this project. Design calculations for each measure have been included in Table E of Appendix K.

#### 3.3.3.1 Underground Infiltration System (I-4)

Most proprietary underground infiltration systems operate similarly to traditional infiltration basins (NYSDEC design variant I-2). These practices reduce runoff volume, remove fine sediment and associated pollutants, recharge groundwater, and provide partial attenuation of peak flows for storm events equal to or less than the design storm. Infiltration practices are appropriate for small drainage areas, but can also be used for larger multiple lot applications, in contrast to rain gardens and dry wells, which are primarily intended for single lots.

Proprietary underground infiltration systems are designed to capture and infiltrate the water quality volume, but do not retain a permanent pool. These systems are typically designed to infiltrate the water quality volume as well as to provide detention above the infiltration zone to attenuate peak volumes of larger storm events to meet flood control requirements.

Soil testing data consisting of deep test pits and falling head permeability tests in support of the design of the proposed underground infiltration system(s) has been provided on the accompanying plans.

#### 3.3.3.2 Bioretention (F-5)

Bioretention filters are shallow landscaped depressions commonly located in parking lot islands or within small pockets in residential areas that receive stormwater runoff. Stormwater flows into the bioretention area, ponds on the surface, and is gradually infiltrated into the soil bed. Pollutants are removed by a number of processes, such as adsorption, filtration, volatilization, ion exchange, and decomposition. Filtered runoff can either be allowed to infiltrate into the surrounding soil, functioning as an infiltration basin or rainwater garden or collected by an under drain system and discharged to the storm sewer system or directly to receiving waters, functioning like a surface sand filter. Runoff from larger storms is generally diverted past the bioretention area to the stormwater collection and conveyance system.

The Bioretention filters (F-5) were designed according to the criteria set forth in Section 6.4 “Stormwater Filtering Systems” of the Design Manual.

### 3.3.3.3 Dry Swale (O-1)

Dry swales are designed to temporarily hold the water quality volume of a storm in a pool or series of pools created by permanent check dams at culverts or driveway crossings. The soil bed consists of native soils or highly permeable fill material, underlain by an under drain system. Pollutants are removed through sedimentation, nutrient uptake, and infiltration.

The Dry Swale(s) (O-1) was/were designed according to the criteria set forth in Section 6.5 “Open Channel Systems” of the Design Manual.

## 4.0 SWPPP IMPLEMENTATION RESPONSIBILITIES

A summary of the responsibilities and obligations of all parties involved with compliance with the NYSDEC SPDES General Permit GP-0-20-001 conditions is outlined in the subsequent sections. For a complete listing of the definitions, responsibilities, and obligations, refer to the SPDES General Permit GP-0-20-001 presented in Appendix I.

### 4.1 Definitions

1. "General SPDES Permit" means a SPDES permit issued pursuant to 6 NYCRR Part 750-1.21 authorizing a category of discharges.
2. "Owner" or "Operator" means the person, persons, or legal entity which owns or leases the property on which the *construction activity* is occurring; and/or an entity that has operational control over the construction plans and specifications, including the ability to make modifications to the plans and specifications. There may be occasions during the course of a project in which there are multiple Owners/Operators, all of which will need to file and maintain the appropriate SWPPP documents and plans, including without limitation, the Notice of Intent (NOI) and Notice of Termination (NOT).
3. "Owner's/Operator's Engineer" means the person or entity retained by an Owner/Operator to design and oversee the implementation of the SWPPP.
4. "Contractor" means the person or entity identified as such in the construction contract with the Owner/Operator. The term "Contractor" shall also include the Contractor's authorized representative, as well as any and all subcontractors retained by the Contractor.
5. "Qualified Inspector" means a person that is knowledgeable in the principles and practices of erosion and sediment control, such as licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, or other Department endorsed individual(s).

It can also mean someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided that person has training in the principles and practices of erosion and sediment control. Training in the principles and practices of erosion and sediment control means that an individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect has received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect shall receive four (4) hours of training every three (3) years.

It can also mean a person that meets the *Qualified Professional* qualifications in addition to the *Qualified Inspector* qualifications.

Note: Inspections of any post-construction stormwater management practices that include structural components, such as a dam for an impoundment, shall be performed by a licensed Professional Engineer.

6. "Qualified Professional" means a person that is knowledgeable in the principles and practices of stormwater management and treatment, such as a licensed Professional Engineer, Registered Landscape Architect, or other Department endorsed individual(s). Individuals preparing SWPPPs that require the post-construction stormwater management practice component must have an understanding of the principles of hydrology, water quality management practice design, water quantity control design, and, in many cases, the principles of hydraulics. All components of the SWPPP that involve the practice of engineering, as defined by the NYS Education Law (see Article 145), shall be prepared by, or under the direct supervision of, a professional engineer licensed to practice in the State of New York.
7. "Trained Contractor" means an employee from a contracting (construction) company, identified in Part III.A.6., that has received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the *Trained Contractor* shall receive four (4) hours of training every three (3) years.

It can also mean an employee from a contracting (construction) company, identified in Part III.A.6., that meets the *Qualified Inspector* qualifications (e.g. licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, or someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity.

The "Trained Contractor(s)" will be responsible for implementation of the SWPPP.

## 4.2 Owner's/Operator's Responsibilities

1. Ensure that control measures are selected, designed, installed, implemented and maintained to minimize the discharge of pollutants and prevent a violation of the water quality standards, meeting the non-numeric effluent limitations in Part I.B.1.(a)-(f) of the SPDES General Permit and in accordance with the New York State Standards and Specifications for Erosion and Sediment Control, dated August 2005.
2. Ensure that practices are selected, designed, installed, and maintained to meet the performance criteria in the Design Manual. Practices must be designed to meet the applicable sizing criteria in Part I.C.2.a., b., c. or d. of GP-0-20-001.
3. Retain the services of a "Qualified Inspector" or "Qualified Professional" as defined under Section 2.1, to provide the services outlined in Section 2.5 "Qualified Inspector's/Qualified Professional's Responsibilities."
4. Retain the services of a "Qualified Professional," as defined under Section 2.1, to provide the services outlined in Section 2.3 "Owner's/Operator's Engineers Responsibilities."

5. Have an authorized corporate officer sign the completed NOI. A copy of the completed NOI is included in Appendix B.
6. Submit the electronic version of the NOI (eNOI) along with the MS4 SWPPP acceptance form using the NYSDEC's website (<http://www.dec.ny.gov/chemical/43133.html>) and provide copy to the MS4.
7. Pay the required initial and annual fees upon receipt of invoices from NYSDEC. These invoices are generally issued in the fall of each year. The initial fee is calculated as \$100.00 per acre disturbed plus \$600.00 per acre of net increase in impervious cover, and the annual fee is \$100.00.
8. Prior to the commencement of construction activity, identify the contractor(s) and subcontractor(s) that will be responsible for implementing the erosion and sediment control measures and stormwater management practices described in this SWPPP. Have each of these contractors and subcontractors identify at least one "Trained Contractor", as defined under Section 2.1 that will be responsible for the implementation of the SWPPP. Ensure that the Contractor has at least one "Trained Contractor" on site on a daily basis when soil disturbance activities are being performed.
9. Schedule a pre-construction meeting which shall include the Town of Philipstown representative, Owner's/Operator's Engineer, Contractor, and their sub-contractors to discuss responsibilities as they relate to the implementation of this SWPPP.
10. Retain the services of an independent certified materials testing and inspection firm operating under the direction of a licensed Professional Engineer to perform regular tests, inspections, and certifications of the construction materials used in the construction of all post-construction stormwater management practices.
11. Retain the services of a NYS licensed land surveyor to perform an as-built topographic survey of the completed post-construction stormwater management facilities.
12. Require the Contractor to fully implement the SWPPP prepared for the site by the Owner/Operator's Engineer to ensure that the provisions of the SWPPP are implemented from the commencement of construction activity until all areas of disturbance have achieved final stabilization and the Notice of Termination (NOT) has been submitted to the NYSDEC.
13. Forward a copy of the NOI Acknowledgement Letter received from the regulatory agency to the Owner's/Operator's Engineer for project records, and to the Contractor for display at the construction site.
14. Maintain a copy of the General Permit (GP-0-20-001), NOI, NOI Acknowledgement Letter, SWPPP, MS4 SWPPP Acceptance Form, inspection reports, Spill Prevention, Countermeasures, Cleanup ("SPCC") Plan, and all documentation in accordance with Part I.F.8.a.-d of GP-0-20-001 necessary to demonstrate eligibility with the permit at the construction site, until all disturbed areas have achieved final stabilization and the NOT has been submitted to the NYSDEC. Place documents in a secure location that must be accessible during normal business hours to an individual performing a compliance inspection.



15. Prior to submitting a Notice of Termination, ensure for post-construction stormwater management practice(s) that are privately owned, the Owner/Operator has a deed restriction in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan.
16. Submit a Notice of Termination (NOT) form (see Appendix B) within 48 hours of receipt of the Owner's/Operator's Engineer's certification of final site stabilization to the following:

NOTICE OF TERMINATION  
NYS DEC, Bureau of Water Permits  
625 Broadway, 4<sup>th</sup> Floor  
Albany, New York 12233-3505

17. Request and receive all SWPPP records from the Owner's/Operator's Engineer and archive those records for a minimum of five (5) years after the NOT is filed.
18. Implement the Post-Construction Inspections and Maintenance procedures outlined in Appendix H.
19. The NOI, SWPPP, and inspection reports required by GP-0-20-001 are public documents that the Owner/Operator must make available for review and copying by any person within five (5) business days of the Owner/Operator receiving a written request by any such person to review the NOI, SWPPP, or inspection reports. Copying of documents will be done at the requester's expense.
20. The Owner/Operator must keep the SWPPP current at all times. At a minimum, the Owner/Operator shall amend the SWPPP:
  - a) Whenever the current provisions prove to be ineffective in minimizing pollutants in stormwater discharges from the project site;
  - b) Whenever there is a change in design, construction, or operation at the construction site that has or could have an effect on the discharge of pollutants; and
  - c) To address issues or deficiencies identified during an inspection by the "Qualified Inspector," the Department, or other Regulatory Authority.

### **4.3 Owner's/Operator's Engineer's Responsibilities**

1. Prepare the SWPPP using good engineering practices, best management practices, and in compliance with all federal, state, and local regulatory requirements.
2. Prepare the Notice of Intent (NOI) form (see Appendix D), sign the "SWPPP Preparer Certification" section of the NOI, and forward to Owner/Operator for signature.
3. Provide copies of the SWPPP to the Town of Philipstown once all signatures and attachments are complete.

4. Enter Contractor's information in Section 2.5 "SWPPP Participants" once a Contractor is selected by the Owner/Operator.
5. Update the SWPPP each time there is a significant modification to the pollution prevention measures or a change of the principal Contractor working on the project who may disturb site soil.

#### **4.4 Contractor's Responsibilities**

1. Sign the SWPPP Contractor's Certification Form contained within Appendix E and forward to the Owner's/Operator's Engineer for inclusion in the Site Log Book.
2. Identify at least one Trained Contractor that will be responsible for implementation of this SWPPP. Ensure that at least one Trained Contractor is on site on a daily basis when soil disturbance activities are being performed. The Trained Contractor shall inspect the erosion and sediment control practices and pollution prevention measures being implemented within the active work area daily to ensure that they are being maintained in effective operating conditions at all times. If deficiencies are identified, the contractor shall begin implementing corrective actions within one business day and shall complete the corrective actions in a reasonable time frame.
3. Provide the names and addresses of all subcontractors working on the project site. Require all subcontractors who will be involved with construction activities that will result in soil disturbance to identify at least one Trained Contractor that will be on site on a daily basis when soil disturbance activities are being performed; and to sign a copy of the Subcontractor's Certification Form contained within Appendix E, then forward to the Owner's/Operator's Engineer for inclusion into the Site Log Book. This information must be retained as part of the Site Log Book.
4. Maintain a Spill Prevention and Response Plan in accordance with requirements outlined in Section 6.4 of this SWPPP. This plan shall be provided to the Owner's/Operator's Engineer for inclusion in the Site Log Book, prior to mobilization on-site.
5. Participate in a pre-construction meeting which shall include the Town of Philipstown representative, Owner/Operator, Owner's/Operator's Engineer, and all subcontractors to discuss responsibilities as they relate to the implementation of this SWPPP.
6. If Contractor plans on utilizing adjacent properties for material, waste, borrow, or equipment storage areas, or if Contractor plans to engage in industrial activity other than construction (such as operating asphalt and/or concrete plants) at the site, Contractor shall submit appropriate documentation to the Owner's/Operator's Engineer so that the SWPPP can be modified accordingly.
7. Implement site stabilization, erosion and sediment control measures, and other requirements of the SWPPP.

8. In accordance with the requirements in the most current version of the NYS Standards and Specifications for Erosion and Sediment Control, conduct inspections of erosion and sediment control measures installed at the site to ensure that they remain in effective operating condition at all times. Prepare and retain written documentation of inspections as well as of all repairs/maintenance activities performed. This information must be retained as part of the Site Log Book.
9. Begin implementing corrective actions within one (1) business day of receipt of notification by the Qualified Inspector/Qualified Professional that deficiencies exist with the erosion and sediment control measures employed at the site. Corrective actions shall be completed within a reasonable time frame.
10. Maintain a record of the date(s) and location(s) that soil restoration is performed in accordance with the accompanying plans and NYSDEC Division of Water's publication "Deep-Ripping and Decompaction," dated April 2008. A copy of this publication is provided in Appendix G. The record that is to be maintained shall be a copy of the overall site grading plan delineating the area(s) and date(s) that the soil was restored.
11. Upon completion of all construction at the site, the contractor responsible for overall SWPPP Compliance shall sign the certification on their Contractor Certification Form indicating that: a.) all temporary erosion and sediment control measures have been removed from the site, b.) the on-site soils disturbed by construction activity have been restored in accordance with the SWPPP and the NYSDEC Division of Water's publication "Deep-Ripping and Decompaction," and c.) all permanent stormwater management practices required by the SWPPP have been installed in accordance with the contract documents.

#### **4.5 Qualified Inspector's/Qualified Professional's Responsibilities**

1. Participate in a pre-construction meeting with the Town of Philipstown representative, Owner/Operator, Contractor, and their subcontractors to discuss responsibilities as they relate to the implementation of this SWPPP.
2. Conduct an initial assessment of the site prior to the commencement of construction and certify in an inspection report that the appropriate erosion and sediment control measures described within this SWPPP have been adequately installed and implemented to ensure overall preparedness of the site.
3. Provide on-site inspections to determine compliance with the SWPPP. Site inspections shall occur at an interval of at least once every seven calendar days. A written inspection report shall be provided to the Owner/Operator and general contractor within one business day of the completion of the inspection, with any deficiencies identified. A sample inspection form is provided in Appendix F.
4. Prepare an inspection report subsequent to each and every inspection that shall include/address the items listed in Part IV.C.4.a-k of GP-0-20-001. Sign all inspection reports and maintain on site with the SWPPP.

5. Notify the owner/operator and appropriate contractor or subcontractor of any corrective actions that need to be taken.
6. Prepare a construction Site Log Book to be used as a record of all inspection reports generated throughout the duration of construction. Ensure that the construction Site Log Book is maintained and kept up-to-date throughout the duration of construction.
7. Review the Contractor's SWPPP records on a periodic basis to ensure compliance with the requirements for daily reports, soil restoration, inspections, and maintenance logs.
8. Based on the as-built survey and material testing certifications performed by others, perform evaluations of the completed stormwater management practices to determine whether they were constructed in accordance with this SWPPP.
9. Conduct a final site assessment and prepare a certification letter to the Owner/Operator indicating that, upon review of the material testing and inspection reports prepared by the firm retained by the Owner/Operator, review of the completed topographic survey, and evaluation of the completed stormwater management facilities, the stormwater management facilities have been constructed substantially in accordance with the contract documents and should function as designed.
10. Prepare the Notice of Termination (NOT). Sign the NOT Certifications VI (Final Stabilization) and VII (Post-construction Stormwater Management Practices), and forward the NOT to the Owner/Operator for signature on Certification VIII (Owner/Operator Certification).
11. Transfer the SWPPP documents, along with all NOI's, permit certificates, NOT's, construction Site Log Book, and written records required by the General Permit to the Owner/Operator for archiving.

## 4.6 SWPPP Participants

1. Owner's/Operator's Engineer: Margaret Smith McManus, PE, Vice President for Engineering  
Badey & Watson, Surveying & Engineering, PC  
3063 Route 9  
Cold Spring, NY 10516  
Phone: 845-265-9217 x219  
Email: mmcmanus@badey-watson.com
2. Owner/Operator: Mr. Ulises Liceaga  
Horton Road, LLC.  
516 East 89th Street  
New York, NY 10128  
Phone: (212) 722-0170  
Email: uliceaga@thefractalgroup.com

3. Contractor<sup>2</sup>:

Name and Title: \_\_\_\_\_

Company Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_  
\_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

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<sup>2</sup> Contractor's information to be entered once the Contractor has been selected.

## 5.0 CONSTRUCTION SEQUENCE

This project has not received written approval from The Town of Philipstown allowing the disturbance of more than five acres of land at any one time. Therefore, if the Contractor's construction sequence requires the disturbance of more than five acres at any one time, written approval must be obtained from NYSDEC prior to disturbing more than five acres at once.

The "Erosion and Sediment Control Plan" in the accompanying drawings identifies the major construction activities that are the subject of this SWPPP. The order (or sequence) in which the major activities are expected to begin is presented on the accompanying drawings, though each activity will not necessarily be completed before the next begins. In addition, these activities could occur in a different order if necessary to maintain adequate erosion and sediment control. If this is the case, the contractor shall notify the Owner's/Operator's Engineer overseeing the implementation of the SWPPP.

The Contractor will be responsible for implementing the erosion and sediment control measures identified on the plans. The Contractor may designate these tasks to certain subcontractors as they see fit, but the ultimate responsibility for implementing these controls and ensuring their proper function remains with the Contractor.

Refer to the accompanying plans for details and specifications regarding the construction sequencing schedule.

## 6.0 CONSTRUCTION-PHASE POLLUTION CONTROL

The SWPPP and accompanying plans identify the temporary and permanent erosion and sediment control measures that have been incorporated into the design of this project. These measures will be implemented during construction, to minimize soil erosion and control sediment transport off-site, and after construction, to control the quality and quantity of stormwater runoff from the developed site.

Erosion control measures, designed to minimize soil loss, and sediment control measures, intended to retain eroded soil and prevent it from reaching water bodies or adjoining properties, have been developed in accordance with the following documents:

- NYSDEC SPDES General Permit for Stormwater Discharges From Construction Activity, Permit No. GP-0-20-001 (effective January 29, 2020 through January 28, 2025)
- New York State Standards and Specifications for Erosion and Sediment Control, NYSDEC (August 2005)
- Town of Philipstown Erosion and Sediment Control Ordinance

The SWPPP and accompanying plans outline the construction scheduling for implementing the erosion and sediment control measures. These documents include limitations on the duration of soil exposure, criteria and specifications for placement and installation of the erosion and sediment control measures, a maintenance schedule, and specifications for the implementation of erosion and sediment control practices and procedures.

Temporary and permanent erosion and sediment control measures that shall be applied during construction generally include:

1. Minimizing soil erosion and sedimentation by stabilization of disturbed areas and by removing sediment from construction site discharges.
2. Preservation of existing vegetation to the greatest extent practical. Following the completion of construction activities in any portion of the site, permanent vegetation shall be established on all exposed soils.
3. Site preparation activities to minimize the area and duration of soil disruption.
4. Establishment of permanent traffic corridors to ensure that "routes of convenience" are avoided.

### 6.1 Temporary Erosion and Sediment Control Measures

The temporary erosion and sediment control measures described in the following sections are included as part of the construction documents.



### 6.1.1 *Stabilized Construction Entrance*

Prior to construction, stabilized construction entrance(s) will be installed, per accompanying plans, to reduce the tracking of sediment onto public roadways.

Construction traffic must enter and exit the site at the stabilized construction entrance(s). The intent is to trap dust and mud that would otherwise be carried off-site by construction traffic.

The entrance(s) shall be maintained in a condition, which will control tracking of sediment onto public rights-of-way or streets. When necessary, additional aggregate will be placed atop the filter fabric to assure the minimum thickness is maintained. All sediment and/or soil spilled, dropped, or washed onto public rights-of-way must be removed immediately. Periodic inspection and needed maintenance shall be provided after each substantial rainfall event.

### 6.1.2 *Dust Control*

Water trucks shall be used as needed during construction to reduce dust generated on-site. Dust control must be provided by the Contractor(s) to a degree that is acceptable to the Owner, and in compliance with the applicable local and state dust control requirements.

### 6.1.3 *Temporary Soil Stockpile*

Materials, such as topsoil, will be temporarily stockpiled (if necessary) on the site during the construction process. Stockpiles shall be located in an area away from storm drainage, water bodies and/or courses, and will be properly protected from erosion by a surrounding silt fence barrier.

### 6.1.4 *Silt Fencing*

Prior to the initiation of and during construction activities, a geotextile filter fabric (or silt fence) will be established downgradient of all disturbed areas. These barriers may extend into non-impact areas to provide adequate protection of adjacent lands.

Clearing and grubbing will be performed only as necessary for the installation of the sediment control barrier. To facilitate effectiveness of the silt fencing, daily inspections and inspections immediately after significant storm events will be performed by the Contractor(s). Maintenance of the fence will be performed as needed.

### 6.1.5 *Temporary Seeding*

For areas undergoing clearing, grading, and disturbance as part of construction activities, where work has temporarily ceased, temporary soil stabilization measures must be initiated by the end of the next business day and completed within fourteen (14) days from the date the soil disturbance activity has temporarily ceased.

### 6.1.6 *Stone and Block Drop Inlet Protection*

Concrete blocks surrounded by wire mesh and crushed stone will be placed around both existing catch basins, and proposed catch basins once they have been installed, to prevent sediment from entering the catch basins and storm sewer system. During construction, crushed stone shall be replaced as necessary to ensure proper function.

#### 6.1.7 *Filter Fabric Drop Inlet Protection*

Install filter fabric or silt fence with wooden stakes at the perimeter of existing or proposed catch basins located in lawn areas, to prevent sediment from entering the catch basins and storm sewer system. Remove sediment accumulation and repair or replace fabric as necessary to ensure proper function.

#### 6.1.8 *Erosion Control Blanket*

Erosion control blankets shall be installed in accordance with manufacturer's requirements on all slopes exceeding 3:1. Erosion control blankets provide temporary erosion protection, rapid vegetative establishment, and long-term erosion resistance to shear stresses generated by high runoff flow velocities associated with steep slopes.

#### 6.1.9 *Stone Check Dams*

Stone check dams will be installed within drainage ditches to reduce the velocity of stormwater runoff, promote settling of sediment, and reduce sediment transport off-site.

Sediment accumulated behind the stone check dam will be removed as needed to maintain flow through the stone check dam and prevent large flows from carrying sediment over or around the dam. Stones shall be replaced as needed to maintain the design cross section of the structures.

#### 6.1.10 *Temporary Sediment Trap*

Temporary sediment traps shall be constructed to intercept sediment-laden runoff, reduce the amount of sediment leaving the disturbed areas, and protect drainage ways, properties, and rights-of-way.

Accumulated sediment shall be removed from the trap when it reaches no greater than 50 percent of the design capacity. Sediment shall not be placed downstream from the embankment, adjacent to a stream, or floodplain.

Temporary sediment traps depicted on the accompanying plans have been designed to provide 3,600 CF of storage per acre of tributary watershed.

#### 6.1.11 *Temporary Diversion Swales*

Temporary diversion swales shall be used to divert off-site runoff around the construction site and divert runoff from stabilized areas around disturbed areas.

#### 6.1.12 *Dewatering Operations*

Dewatering will be used to intercept sediment-laden stormwater or pumped groundwater and allow it to settle out of the pumped discharge prior to being discharged from the site. Water from dewatering operations shall be treated to eliminate the discharge of sediment and other pollutants. Water resulting from dewatering operations shall be directed to temporary sediment traps or dewatering devices. Temporary sediment traps and dewatering bags will be provided, installed, and maintained at downgradient locations to control sediment deposits to downstream surfaces.

## 6.2 Permanent Erosion and Sediment Control Measures

The permanent erosion and sediment control measures described in the following sections are included as part of the construction documents.

### 6.2.1 *Establishment of Permanent Vegetation*

Disturbed areas that will be vegetated must be seeded in accordance with the contract documents. The type of seed, mulch, and maintenance measures as described in the contract documents shall also be followed.

Permanent soil stabilization measures must be initiated by the end of the next business day and completed within fourteen (14) days from the date the soil disturbance activity has permanently ceased.

### 6.2.2 *Rock Outlet Protection*

Rock outlet protection shall be installed at the locations as indicated and detailed on the accompanying plans. The installation of rock outlet protection will reduce the velocity and energy of water, such that the flow will not erode downstream surfaces.

### 6.2.3 *Permanent Turf Reinforcement*

Permanent turf reinforcement mats (TRMs) provide long-term erosion protection and vegetation establishment assistance while permanently reinforcing vegetation. TRMs shall be installed on slopes/channels where specified. TRM's provide two key advantages. First, their unique fiber shape and 3-D pattern create a thick matrix of voids that trap seed, soil, and water in place for quicker, thicker vegetation growth. Secondly, they provide additional reinforcement that doubles the vegetation's natural erosion protection abilities by remaining a permanent part of the application and anchoring mature plants to the soil for superior, long-term erosion resistance.

## 6.3 Other Pollutant Controls

Other necessary pollutant controls are listed below:

### 6.3.1 *Solid and Liquid Waste Disposal*

No solid or liquid waste materials, including building materials, shall be discharged from the site with stormwater. All solid waste, including disposable materials incidental to any construction activities, must be collected and placed in containers. The containers shall be emptied periodically by a licensed trash disposal service and hauled away from the site.

Substances that have the potential for polluting surface and/or groundwater must be controlled by whatever means necessary in order to ensure that they do not discharge from the site. As an example, special care must be exercised during equipment fueling and servicing operations. If a spill occurs, it must be contained and disposed of so that it will not flow from the site or enter groundwater, even if this requires removal, treatment, and disposal of soil. In this regard, potentially polluting substances should be handled in a manner consistent with the impact they represent.

### 6.3.2 Sanitary Facilities

Temporary sanitary facilities will be provided by the Contractor throughout the construction phase. They must be utilized by all construction personnel and will be serviced by a licensed commercial Contractor. These facilities must comply with state and local sanitary or septic system regulations.

### 6.3.3 Water Source

Non-stormwater components of site discharge must be clean water. Water used for construction, which discharges from the site, must originate from a public water supply or private well approved by the Health Department. Water used for construction that does not originate from an approved public supply must not discharge from the site; such water can be retained in temporary ponds/sediment traps until it infiltrates and/or evaporates.

## 6.4 Construction Housekeeping Practices

During the construction phase, the Contractor(s) will implement the following measures:

### 6.4.1 Material Stockpiles

Material resulting from clearing and grubbing operations that will be stockpiled on-site, must be adequately protected with downgradient erosion and sediment controls.

### 6.4.2 Equipment Cleaning and Maintenance

The Contractor(s) will designate areas for equipment cleaning, maintenance, and repair. The Contractor(s) and subcontractor(s) will utilize those areas. The areas will be protected by a temporary perimeter berm.

### 6.4.3 Detergents

The use of detergents for large-scale washing is prohibited (i.e., vehicles, buildings, pavement surfaces, etc.)

### 6.4.4 Spill Prevention and Response

A Spill Prevention and Response Plan shall be developed for the site by the Contractor(s). The plan shall detail the steps required in the event of an accidental spill and shall identify contact names and phone numbers of people and agencies that must be notified.

The plan shall include Material Safety Data Sheets (MSDS) for all materials to be stored on-site. All workers on-site will be required to be trained on safe handling and spill prevention procedures for all materials used during construction. Regular tailgate safety meetings shall be held and all workers that are expected on the site during the week shall be required to attend.

### 6.4.5 Concrete Wash Areas

Concrete trucks will be allowed to wash out or discharge surplus concrete or drum wash water on the site, but only in specifically designated diked and impervious washout areas, which have been prepared

to prevent contact between the concrete wash and stormwater. Waste generated from concrete wash water shall not be allowed to flow into drainage ways, inlets, receiving waters, or highway right of ways, or any location other than the designated concrete wash areas. Proper signage designating the "Concrete Wash Areas" shall be placed near the facility. Concrete wash areas shall be located at minimum 100 linear feet from drainage ways, inlets, and surface waters.

The hardened residue from the concrete wash areas will be disposed of in the same manner as other non-hazardous construction waste materials. Maintenance of the wash area is to include removal of hardened concrete. Facility shall have sufficient volume to contain all the concrete waste resulting from washout and a minimum freeboard of 12 inches. Facility shall not be filled beyond 95% capacity and shall be cleaned out once 75% full unless a new facility is constructed. The Contractor will be responsible for seeing that these procedures are followed.

Sawcut Portland Cement Concrete (PCC) slurry shall not be allowed to enter drainage ways, inlets, and/or surface waters. Sawcut residue should not be left on the surface of pavement or be allowed to flow over and off pavement.

The Project may require the use of multiple concrete wash areas. All concrete wash areas will be located in an area where the likelihood of the area contributing to stormwater discharges is negligible. If required, additional BMPs must be implemented to prevent concrete wastes from contributing to stormwater discharges.

#### 6.4.6 *Material Storage*

Construction materials shall be stored in a dedicated staging area. The staging area shall be located in an area that prevents negative impacts of construction materials on stormwater quality.

Chemicals, paints, solvents, fertilizers, and other toxic material must be stored in waterproof containers. Except during application, the contents must be kept in trucks or within storage facilities. Runoff containing such material must be collected, removed from the site, treated, and disposed of at an approved solid waste or chemical disposal facility.

## 7.0 INSPECTIONS, MAINTENANCE, AND REPORTING

### 7.1 Inspection and Maintenance Requirements

#### 7.1.1 Pre-Construction Inspection and Certification

Prior to the commencement of construction, the Qualified Inspector/Qualified Professional shall conduct an assessment of the site and certify that the appropriate erosion and sediment control measures have been adequately installed and implemented. The Contractor shall contact the Qualified Inspector/Qualified Professional once the erosion and sediment control measures have been installed.

#### 7.1.2 Construction Phase Inspections and Maintenance

A Qualified Inspector/Qualified Professional, as defined in Appendix A of the General Permit GP-0-20-001, shall conduct regular site inspections between the time this SWPPP is implemented and final site stabilization.

The purpose of site inspections is to assess performance of pollutant controls. Based on these inspections, the Qualified Inspector/Qualified Professional will decide whether it is necessary to modify this SWPPP, add or relocate sediment barriers, or whatever else may be needed in order to prevent pollutants from leaving the site via stormwater runoff. The general contractor has the duty to cause pollutant control measures to be repaired, modified, maintained, supplemented, or whatever else is necessary in order to achieve effective pollutant control.

Examples of particular items to evaluate during site inspections are listed below. This list is not intended to be comprehensive. During each inspection the inspector must evaluate overall pollutant control system performance as well as particular details of individual system components. Additional factors should be considered as appropriate to the circumstances.

1. Locations where vehicles enter and exit the site must be inspected for evidence of off-site sediment tracking. A stabilized construction entrance will be constructed where vehicles enter and exit. This entrance will be maintained or supplemented as necessary to prevent sediment from leaving the site on vehicles.
2. Sediment barriers must be inspected and, if necessary, they must be enlarged or cleaned in order to provide additional capacity. All material from behind sediment barriers will be stockpiled on the up slope side. Additional sediment barriers must be constructed as needed.
3. Inspections will evaluate disturbed areas and areas used for storing materials that are exposed to rainfall for evidence of, or the potential for, pollutants entering the drainage system. If necessary, the materials must be covered or original covers must be repaired or supplemented. Also, protective berms must be constructed, if needed, in order to contain runoff from material storage areas.
4. Grassed areas will be inspected to confirm that a healthy stand of grass is maintained. The site has achieved final stabilization once all areas are covered with building foundation or pavement, or have a stand of grass with at least 80 percent density. The density of 80 percent or greater must be maintained to be considered as stabilized. Areas must be watered, fertilized, and reseeded as needed to achieve this goal.

5. All discharge points must be inspected to determine whether erosion control measures are effective in preventing significant impacts to receiving waters.

The inspection reports must be completed entirely and additional remarks should be included if needed to fully describe a situation. An important aspect of the inspection report is the description of additional measures that need to be taken to enhance plan effectiveness. The inspection report must identify whether the site was in compliance with the SWPPP at the time of inspection and specifically identify all incidents of non-compliance.

Within one (1) business day of the completion of an inspection, the *Qualified Inspector/Qualified Professional* shall notify the Owner/Operator and appropriate contractor or subcontractor of any corrective actions that need to be taken. The contractor or subcontractor shall begin implementing the corrective actions within one (1) business day of the notification and shall complete the corrective actions in a reasonable time frame.

In addition to the inspections performed by the *Qualified Inspector/Qualified Professional*, the Contractor shall perform routine inspections that include a visual check of all erosion and sediment control measures. All inspections and maintenance shall be performed in accordance with the inspection and maintenance schedule provided on the accompanying plans. Sediment removed from erosion and sediment control measures will be exported from the site, stockpiled for later use, or used immediately for general non-structural fill.

It is the responsibility of the general contractor to assure the adequacy of site pollutant discharge controls. Actual physical site conditions or contractor practices could make it necessary to install more structural controls than are shown on the accompanying plans. (For example, localized concentrations of runoff could make it necessary to install additional sediment barriers, sediment traps, etc.) Assessing the need for additional controls and implementing them or adjusting existing controls will be a continuing aspect of this SWPPP until the site achieves final stabilization.

#### 7.1.3 *Temporary Suspension of Construction Activities*

For construction sites where soil disturbance activities have been temporarily suspended (e.g. Winter shutdown) and temporary stabilization measures have been applied to all disturbed areas, the frequency of Qualified Inspector/Qualified Professional inspections can be reduced to once every 30 calendar days. Prior to reducing the frequency of inspections, the Owner/Operator shall notify the NYSDEC Region 3 stormwater contact person and the Town of Philipstown MS4 officer in writing.

#### 7.1.4 *Partial Project Completion*

For construction sites where soil disturbance activities have been shut down with partial project completion, all areas disturbed as of the project shutdown date have achieved final stabilization, and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational, the inspections by the Qualified Inspector/Qualified Professional can stop. Prior to the shutdown, the Owner/Operator shall notify the NYSDEC Region 3 stormwater contact person the Town of Philipstown MS4 officer writing.

If soil disturbance activities have not resumed within two years from the date of shutdown, a Notice of Termination (NOT) shall be properly completed and submitted to the NYSDEC.



### 7.1.5 *Post-Construction Inspections and Maintenance*

Inspections and maintenance of final stabilization measures and post-construction stormwater management practices shall be performed in accordance with Appendix H, once all disturbed areas are stabilized and all stormwater management systems are in place and operable.

## 7.2 Reporting Requirements

### 7.2.1 *Inspection and Maintenance Reports*

Inspection/maintenance reports shall be prepared prior to and during construction in accordance with the schedule outlined herein and in the SPDES General Permit GP-0-20-001 Part IV.C. The reports shall be prepared to identify and document the maintenance of the erosion and sediment control measures. A sample inspection form is provided in Appendix F.

Specifically, each inspection shall record the following information:

1. Date and time of inspection.
2. Name and title of person(s) performing inspection.
3. A description of the weather and soil conditions (e.g. dry, wet, saturated) at the time of the inspection.
4. A description of the condition of the runoff at all points of discharge from the construction site. This shall include identification of any discharges of sediment from the construction site. Include discharges from conveyance systems (i.e. pipes, culverts, ditches, etc.) and overland flow.
5. A description of the condition of all natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the construction site which receive runoff from disturbed areas. This shall include identification of any discharges of sediment to the surface water body.
6. Identification of all erosion and sediment control practices and pollution prevention measures that need repair or maintenance.
7. Identification of all erosion and sediment control practices and pollution prevention measures that were not installed properly or are not functioning as designed and need to be reinstalled or replaced.
8. Description and sketch of areas with active soil disturbance activity, areas that have been disturbed but are inactive at the time of the inspection, and areas that have been stabilized (temporary and/or final) since the last inspection.
9. Indication of the current phase of construction of all post-construction stormwater management practices and identification of all construction that is not in conformance with the SWPPP and technical standards.

10. Corrective action(s) that must be taken to install, repair, replace or maintain erosion and sediment control practices and pollution prevention measures; and to correct deficiencies identified with the construction of the post-construction stormwater management practices.
11. Identification and status of all corrective actions that were required by previous inspection.
12. Color photographs, with date stamp, that clearly show the condition of all practices that have been identified as needing corrective actions. The *Qualified Inspector/Qualified Professional* shall attach paper color copies of the digital photographs to the inspection report being maintained onsite within seven (7) calendar days of the date of the inspection. The *Qualified Inspector/Qualified Professional* shall also take digital photographs, with date stamp, that clearly show the condition of the practice(s) after the corrective action has been completed. The *Qualified Inspector/Qualified Professional* shall attach the paper color copies of the digital photographs to the inspection report that documents the completion of the corrective action work within seven (7) calendar days of that inspection.

All inspection reports shall be signed by the *Qualified Inspector/Qualified Professional*. Pursuant to Part II.C.2 of GP-0-20-001, the inspection reports shall be maintained on site with the SWPPP.

#### 7.2.2 *Site Log Book*

The Owner/Operator shall retain a copy of the SWPPP required by GP-0-20-001 at the construction site from the date of initiation of construction activities to the date of final stabilization.

During construction, the Owner's/Operator's Engineer shall maintain a record of all SWPPP inspection reports at the site in the Site Log Book. The Site Log Book shall be maintained on-site and made available to the permitting authority, if necessary.

#### 7.2.3 *Post Construction Records and Archiving*

Following construction, the Owner/Operator shall retain copies of the SWPPP, the complete construction Site Log Book, and records of all data used to complete the NOI to be covered by this permit, for a period of at least five years from the date that the site is finally stabilized. This period may be extended by the NYSDEC, at its sole discretion, at any time upon written notification.

Records shall be maintained of all post construction inspections and maintenance work performed in accordance with the requirements outlined in Appendix F and H.

## **APPENDIX I**

# HUDSON HIGHLANDS RESERVE SUBDIVISION PLAN SET, PREPARED BY BADEY & WATSON, DATED MARCH 3, 2022

SHEET 1	COVER SHEET
SHEET 2	CONSERVATION SUBDIVISION PLAT
SHEET 3	EXISTING CONDITIONS
SHEET 4	CONSTRAINTS MAP
SHEET 5	PLOT PLAN
SHEET 6	NORTH SITE PLAN
SHEET 7	SOUTH SITE PLAN
SHEET 8	NORTH UTILITY PLAN
SHEET 9	SOUTH UTILITY PLAN
SHEET 10	NORTH EROSION & SEDIMENT CONTROL
SHEET 11	SOUTH EROSION & SEDIMENT CONTROL
SHEET 12	ROAD PROFILE LAYOUT
SHEET 13	DRIVEWAY PROFILE LAYOUT
SHEET 14	SANITARY PROFILES
SHEET 15	STORMWATER PROFILE LAYOUT
SHEET 16	SIGHT LINES AND PROFILES
SHEET 17	NOTES AND DETAILS
SHEET 18	DETAILS
SHEET 19	DETAILS