## ADDENDUM TO DAVID MELLINS

## WETLAND AND WATERCOURSE APPLICATION

JULY 30, 2021

- 1. As of July 2021, selective ash trees infective with emerald ash borer were removed from the forested embankment leading from our lawn down to Shaw creek. Moreover, sugar maple branches, which had previously threatened the structure of the house, deck and electric lines were removed. We were requested to suspend this work by the Town of Washington building inspector until such time as a Wetlands and Waterway permit or authorization from the town building and zoning board could be secure. We are requesting permission to be able to continue judiciously removing some lower limbs of sugar maples and other trees to enhance the view of the bend in Shaw Creek due Southwest of the house and deck. This work will be conducted with concern for the maintenance of the forest health and wetland environment on the embankment leading to Shaw Creek.
- 2. With the authorization of James Finley, we proceeded this July (2021) with the planting of ground cover on the bare slope below the retaining wall due North of the house. This action was completed to minimize soil erosion that might compromise the stream.
- 3. Because water consistently seeps into our basement and leads to the growth of black mold in the mortar joints of the original field stone basement (19<sup>th</sup> century), we propose to divert East running roof water via pipes to an elongated underground cistern buried at the Western border of the gravel parking area, just East of the hornbeam hedge (see Site and Materials Plan). This diversion will also decrease stress and preserve the structure of the retaining wall, as well as diminish the unfiltered runoff of stormwater into Shaw Creek and the pond above the waterfall and dam.
- 4. We propose to build two patios, one due North of the house and one due Southwest at the Southwest corner of the lawn. The stones for these patios will be set in stone dust above item four to maximize water permeability.
- 5. To neutralize any loss in water permeability by the replacement of 450 sq ft of lawn with field stone in this upper patio, we will divert South running roof water via pipes into a SC-310 STORMTECH Chamber underground cistern. This cistern will detain 178 cubic feet of storm water, the equivalent of 3.5 inches of rainwater onto the 600 sq/ft surface of the East facing roof. To put this into context, this July (an exceedingly wet month), New York State on average experienced 8.53 inches of rain. A perk test at the site of the cistern measured the absorption rate to be 1" per hour, more than sufficient to allow the cistern to disperse water into the surrounding soil.
- 6. Loss in water permeability at the site of the lower (Southwest) patio has already been offset by the diversion of West running roof water into a dry well located to the Northwest of the deck during the last round of renovations.