

**Stow Conservation Commission  
Minutes  
October 15, 2019**

A meeting of the Stow Conservation Commission was held at the Stow Town Building, 380 Great Road, Stow, Massachusetts, on October 15, 2019 at 7:30 in the evening.

There were present:     Serena Furman, Vice-Chair  
                                  Cortni Frecha  
                                  Sandra Grund  
                                  Ingeborg Hegemann Clark

Absent:                     Jeff Saunders, Chair  
                                  Andy Snow

                                  comprising a quorum of the Commission

Also present:             Kathy Sferra, Conservation Coordinator  
                                  Jacquie Goring, Conservation Assistant

**Minutes:** *Cortni Frecha made a motion to approve the minutes of September 17, 2019 as written. Sandra Grund seconded the motion and it was passed unanimously.*

**Certificate of Compliance Requests**

- **227 Harvard Road:** The Certificate of Compliance (COC) Request for 227 Harvard has been tabled until the next meeting.
- **1-3 Rock Bottom Road:** Sferra visited the site and confirmed the site is stable and fully vegetated. Sferra noted that she did find a new yard waste pile in the 35' no disturb buffer and the homeowner agreed to remove it. *Ingeborg Hegemann Clark made a motion to issue a COC for 1-3 Rock Bottom Road. Cortni Frecha seconded the motion and it was passed unanimously.*
- **141-149 Whitman Street:** Sferra, Cortni Frecha, and Ingeborg Hegemann Clark visited the site and noted that the wetland restoration area has grown in well with a mix of wetland grasses and wildflowers and the trees that were planted are healthy. Mark Harnett confirmed at the site visit that the Commission could visit the property annually to observe the restoration area. *Cortni Frecha made a motion to issue a COC for 141-149 Whitman Street. Sandra Grund seconded the motion and it was passed unanimously.*
- **323 Great Road:** Frecha visited the site and noted that the trail down to the pond is stable but the grass is thin at the top of the park but has been hydroseeded again. Sferra noted that the area where the grass is thin is outside the 100' buffer to the pond. Sferra added that some of the wattles may remain in place in that area and the silt fence is proposed to be removed before the park opening. *Sandra Grund made a motion to issue a COC for 323 Great Road. Cortni Frecha seconded the motion and it was passed unanimously.*

**Request for Extension – 68 Pine Point –** Sferra informed the Commission that the owners of 68 Pine Point have requested an extension to the October 1<sup>st</sup> deadline for the compensatory flood storage area to June 30, 2020 because they are only there in the summer and would like to be there while the work is done. Sferra confirmed the concrete has been removed from the lake and the site is stable. *Cortni Frecha made a motion to approve the deadline extension to June 30, 2020. Sandra Grund seconded the motion and it was passed unanimously.*

**Request for Extension of Restoration Deadline – Collings Foundation Gravel Pit –** Sferra informed the Commission that the Collings Foundation has requested an extension to the restoration deadline to July 15, 2021 to coincide with the Planning Board decision. Sferra has requested more detail and interim deadlines. Sferra added that she has recommended the Planning Board and Conservation Commission staff meet with Collings to discuss the decisions.

**Request to Clarify Application Procedure – Fence at 148 Hudson Road** – Sferra informed the Commission that the applicant has submitted a Request for Amendment which will be included on the next agenda. Sferra will confirm with Andy Snow that she is able to visit the site.

**Conservation Land Management– Authorization for Minor Temporary Work at Susan Lawrence Park** – Sferra informed the Commission that exploratory work may be required at Susan Lawrence Park to address a potential hydraulic fluid leak at Town Building. Sferra noted that borings are exempt under the Wetlands Protection Act but the Commission also owns the property. The Commission agreed borings should be allowed but additional excavation should be brought back to the Commission and may require a permit. *Ingeborg Hegemann Clark made a motion to authorize minor temporary work at Susan Lawrence Park. Sandra Grund seconded the motion and it was passed unanimously.*

**Comment Period – Massachusetts Regulations on Furbearer Hunting** – Sferra informed the Commission that the comment period for revisions to the State furbearer hunting regulations is open including a ban on coyote killing contests. Sferra noted that there are two coyote killing contests in Massachusetts annually and if the Commission would like to send a short letter of support on the ban. Grund noted she would like to see the letter before it is sent. *Cortni Frecha made a motion to send a letter of support for the revisions to the Massachusetts furbearer hunting regulations. Sandra Grund seconded the motion and it was passed unanimously.*

**Town Meeting Warrant Article – Box Mill Road Bridge** – The Commission reviewed the draft Town Meeting warrant article for the legal and appraisal costs for the Box Mill Road Bridge land takings for \$30,000. The Commission discussed the cost for the legal and appraisal work and confirmed that it could be put out to bid and the \$30,000 is a credible estimate for the work. *Cortni Frecha made a motion to approve the warrant article as amended to correct a typo. Sandra Grund seconded the motion and it was passed unanimously.*

**Notice of Intent - 46 Pine Point Road – Diana Ferry** – Steve Poole, Lakeview Engineering, and homeowner Diana Ferry were present. Poole reviewed the proposed plans for a pathway and retaining wall within the 35' no disturb buffer to access the existing well house. Poole noted that the lot is very steep down to the lake and the existing walkway to service the pump house is only eighteen inches wide at its narrowest point and no longer safe. The proposed work includes digging into the slope to widen the path to 30 inches and install a concrete block wall with steel rebar. The excavated material from the pathway will be placed behind the concrete block retaining wall and any excess material will be brought up to the top of the slope using buckets. All work will be completed by hand. Grund visited the site and reviewed photos noting that the slope is very steep and the path is very unsafe. Grund added that silt fence is proposed for erosion controls and the applicant would also like to put in landscape edging and pebbles along the path. The Commission discussed the proposed work and noted that the current slope condition is impacting the lake. Poole confirmed there is very little vegetation on that slope to be removed and the piece of plywood left by the shoreline can be removed. The Commission confirmed that the existing shoreline retaining wall will remain and the proposed work will be completed in three days. Poole also noted that the proposed stone for the path will be peastone and the landscape edging will be used to prevent the stone from washing away. *Cortni Frecha made a motion to close the public hearing. Sandra Grund seconded the motion and it was passed unanimously.*

The Commission reviewed the draft decisions and noted that the stabilization of the existing eroding slope serves as mitigation for work in the 35' no disturb buffer. The Commission also requested the findings include that the work will be done by hand and a condition requiring that the piece of plywood on the bank be removed. The Commission agreed that photographs of the completed work and a written statement from a registered professional engineer be sufficient to request a COC. The Commission also requested a condition requiring the silt fence to remain over the winter. *Cortni Frecha moved to issue the Order as amended. Sandra Grund seconded and the motion was approved unanimously.*

**Appointment – Carol Gumbart – Stow Conservation Trust** – Carol Gumbart, Susan Crane and John Sangermano of Stow Conservation Trust (SCT) and Mike Callahan of Beaver Solutions were present to discuss beaver management at Shepherd Memorial Woodlands. Crane described the property location noting that it is an

over 30 acre parcel land-locked by Captain Sargent Conservation Area (CSCA), Kennedy Conservation Restrictions, and Acton Conservation Land. Crane also noted that SCT and the Stow Conservation Commission (SCC) worked for ten years on purchasing the property from the Dunn estate. Crane reviewed the Conservation Restriction (CR) application submitted by SCC which states that the property is the key connector between Stow and Acton conservation land. Crane also reviewed points from the CR regarding passive recreation and noted the property was included in the 2016 Open Space and Recreation Plan. Crane clarified that the property is owned by the SCT and the CR is held by the SCC. Crane noted that shortly after the two crossings were built by Eagle Scouts the area was inundated with water due to beaver activity. Crane stated that SCT would like to work with the Commission to find a solution that works for everyone and connect the trail to Acton. Sferra clarified that since the CR was written it was discovered that it is not possible to access Acton Conservation Land unless Acton builds a long boardwalk over a very large wetland area. Crane confirmed with Sferra that even if the water level was lowered using a beaver deceiver access to Acton would still not be possible.

Gumbart noted that a lollipop trail was constructed on the property prior to flooding and the SCT would like Callahan to install a flow control device in the main channel of Heath Hen Meadow Brook at a large beaver dam. Callahan reviewed the location of two beaver dams which he noted has raised the water level three feet in the area of the trail and covered the first Eagle Scout bridge with a foot of water. Callahan stated that he proposes installing a flow control device to lower the water by a foot so it is below the bridge and to protect the causeway which connects CSCA to Flagg Hill. Callahan stated that the associated watershed is four and a half miles and expressed concern about the culverts in the causeway and noted that the culverts may need to be protected from damming if a flow control device is installed on the Shepherd property. Callahan stated that the main goal is to drop the level of the beaver pond by one foot using a flow control device. Callahan described the proposed flow control device materials and installation using fifteen inch wide 40 foot long black corrugated pipes installed through the dam with fencing around each intake. Callahan noted that the intake fencing basket does not need to be cleared of sticks and leaves and beavers will not clog it because they do not feel or hear the water flowing in the pipe. Callahan added that the hole in the dam will be dug by hand and the intake pipes would be set at a height to lower the water level by one foot. Callahan noted that Beaver Solutions was started in 2000 and has installed 1,600 devices across Massachusetts and they work very well. Callahan clarified that there must be a minimum depth of three feet of water for the flow control device or the beavers can sense the flow in the intake pipes and will try to block them. Callahan added that the beavers can become annoyed by the drop in water level and may go downstream and dam but he does not think that is likely in this situation because they picked a pinch point in the river for the existing dam. Callahan also noted that if the water level is dropped by about a foot, less water would flow over the stone wall at the Kennedy/Shepherd boundary to the lower dam in Acton. Callahan added that the lower dam could be breached but they should first lower the water to a level below the boardwalk and see what happens.

The Commission confirmed the water flow is towards Acton. Callahan stated that he does not want to lower the water level more than a foot to save as much beaver created wetland as possible and avoid the beavers damming elsewhere. Callahan confirmed that he believes lowering the water level by a foot will clear the boardwalk. Sferra stated that characteristics of the wetland behind the dam have been changed by the beavers and it is now a beautiful deep swamp with many dead trees. Sferra asked why a flow control device would not be installed in the smaller downstream dam in Acton which would directly affect the area of trail flooding and not impact the main beaver pond. Callahan stated that the causeway would still be at risk if they did not do the larger dam and the smaller downstream dam has very shallow water and does not have the three feet needed for a flow control device therefore would not be effective. Callahan added that installing a flow control device on the larger dam would be less likely to bother the beavers and encourage them to dam downstream. The Commission asked if the water level of the pond on the Kennedy CR has been altered by the dam. Sferra noted that the pond level fluctuates seasonally and Heath Hen Meadow Brook has recently dropped by about a foot. With recent work, the causeway is dry. The Commission reviewed photos of the area provided by Sferra. Callahan stated that he has visited the property once and noted that the dam had a lot of old sticks along with fresh activity and has clearly been in place for a long time. Sferra noted that the original location for the trail connecting CSCA to Shepherd was relocated because the area was wet back then and the Shepherd trail was completed during the drought. Sangermano noted that the water level in the culvert pipes under the causeway varies seasonally. Sferra also confirmed that the flooding has not impacted any septic systems or wells along the Brook, so there is no health and safety reason for the work.

Sandra Grund noted the natural value of the beaver pond and recognized the CR goals for passive recreation on the property but recommended the goals be re-assessed now that it is known that a connection to Acton Conservation land is not possible. Gumbart reviewed the trail location and stated that the property was purchased with the intent for passive recreation but the SCT does not want to impact beaver and installing a flow control device would not remove them from the area. Callahan confirmed lowering the water level by one foot would not expose the lodge entry. Callahan added that beavers are always moving up and down stream creating habitat and dams may remain in place or collapse on their own and installing a flow control device is not too intrusive. Grund asked about the impact the flow control device would have on the beaver habitat. Callahan stated that for the flow control device to work they need a minimum of three feet of water which is what beavers also need to keep sticks stored for food over the winter without freezing. Callahan added that beavers will build secondary dams up and down stream as their young disperse. Callahan added that he likes to do this work because it is a balance and from an ecological impact lowering the water will create a smaller beaver pond but not have a significant negative impact on the wetland. Callahan also noted that beavers harvest trees 100 to 200 feet from the water's edge so lowering the water level will reduce how far they forage but lowering the water level one foot will not make a significant difference.

Crane stated that she hopes all of the goals and purposes of the CR can be met despite not being able to connect to Acton. Grund recommended that SCT iteratively look at the goals of the CR including retaining habitat. Crane stated that Gumbart and Callahan would be able to speak to the impacts on habitat but she believes that the beavers can be protected with allowing public access to the property. The Commission discussed posting stakes along the current wetland edge to monitor the impacts of a flow control device and requiring removal of the flow control device if there are significant impacts. The Commission discussed the need for hiring an engineer or hydrologist if an application is submitted. Sferra confirmed that Acton Conservation land could be accessed during the winter when the area is frozen as could the rest of the Shepherd property. Gumbart and Callahan confirmed that the flow control device could be removed or raised if there are significant impacts.

Sferra asked the Commission if they are open to a proposal to install a flow control device in the main dam, if the Commission would like to see alternatives, and if they would like engineered plans. Frecha noted that there are not a lot of safe places for beaver and if the flooding is only impacting a trail there are many other places to walk in Stow. Frecha added that if the beaver are forced to go up or down stream due to the installation of a flow control device they could be trapped or killed by abutments. Grund stated that she would be open to a filing for a flow control device and asked if the Commission would want engineered plans or an opinion from a hydrologist or if Callahan's experience was sufficient. Sferra expressed concern about the volume of water that is being held back by the dam and the risk of flooding downstream into Acton if the dam fails. Callahan stated that the risk of a dam breach would be lower if a flow control device was installed because the beaver will patch any leaks when the pipe is installed by hand and the dam will be less likely to overtop. Callahan added that he has seen a dam with a flow control device after flooding from a hurricane and the section of dam with the pipe acted like an anchor while the rest of the dam blew out.

Ingeborg Hegemann Clark noted that riverine systems are temporal and she is not as concerned about impacts on the beaver because of their exponential population growth. Hegemann Clark stated that she did not believe that the Commission needs engineered drawings and Callahan's experience would be sufficient. Hegemann Clark noted that flow control devices are used elsewhere including at Walden Pond to manage a floating bog and noted the temporal nature of habitats like heron rookeries which only remain for five to ten years before the trees fall. Hegemann Clark added that water levels vary seasonally and the alteration impacts are to Bank, Bordering Vegetated Wetland, Bordering Land Subject to Flooding, and Land Under Water and that protecting the existing condition could be narrow minded. Hegemann Clark added that Sferra's comment regarding landownership is important and recommended that SCT coordinate with and get support from the other landowners. Hegemann Clark agreed with the suggestion to stake the current wetland edge as a reference point without a hydrology report and suggested spot elevations of the dams could be done to provide quantitative data to see if dropping the water level by a foot would solve the issue. Hegemann Clark also suggested that the USGS topographic map may be able to be used to infer the necessary water level drop.

Sferra noted that even if the water level is lowered some work may be needed on the existing boardwalk which is almost certainly too short given wet conditions. In addition, the unpermitted bridge along the Captain Sargent boundary should be included in any filing. Frecha recommended that SCT look for other places for a trail on the property and assess the cost benefit analysis of installing a flow control device and likes the idea of an area that is not reachable by people. Gumbart stated that they have not found a better location for the trail to cross the wetland and Sferra recommended that the trail could be left as an out and back trail. Sferra confirmed she would follow up with SCT and work with Gumbart on coordinating with Acton and noted if the dam in Acton is proposed to be breached that will require a permit with the Acton Conservation Commission and landowner permission.

**Appointment – Barry Price – 166 North Shore Drive – DEP #299-666** – Barry Price, homeowner of 166 North Shore Drive, was present. Sferra reviewed the approved work and noted that the Order requires shoreline retaining wall work to be done during drawdown. Sferra noted that the drawdown has just started and the water level has started going down but Price is eager to start and would like to use a floating turbidity barrier rather than waiting for dry conditions. Price stated that he is concerned that the drawdown could be stopped or the ground will freeze before the work can be completed. Price described the turbidity barrier and noted that it has been used for the Hale Road project previously. The Commission discussed the use of the turbidity barrier and concerns about material going underneath the barrier and further out into the lake. The Commission requested that as soon as the area between the existing wall and turbidity barrier is dry the Commission be notified to complete a site visit. *Ingeborg Hegemann Clark moved to approve the minor modification to the plan for 166 North Shore Drive to allow the installation of a turbidity barrier as shown on the plan dated 10/9/19. Cortni Frecha seconded and the motion was approved unanimously.*

#### **Coordinator's Report**

- **Conservation Commission Member Search:** Sferra noted that she and Goring met with a prospective Commission member who is interested in joining.
- **Forest Cutting Plan DiPietro Property:** Sferra noted that she has received a Forest Cutting Plan for the DiPietro property which includes removal of many trees in Bolton. Sferra is working with the Conservation Agent in Bolton who will be contacting the State Forester regarding the ongoing wetlands violations on the property, the unpaid property tax issues and court judgment for monetary damages.
- **Community Gardens Harrowing:** Goring reviewed the proposal from Henderson Striker for harrowing, mowing and seeding the annual Community Garden plots with winter rye. Goring noted that the Jim Henderson recommends the annual plots be mowed prior to harrowing and seeding which should help keep the foxtail grass and weeds down. The Commission agreed the work could be done this year and the annual gardeners should be contacted regarding contributing to the cost of the winter rye seeding.

**Adjournment** – *Sandra Grund departed. Cortni Frecha made a motion to adjourn the meeting at 9:24 PM for lack of quorum. Ingeborg Hegemann Clark seconded the motion and it was passed unanimously.*

Respectfully submitted,

Jacquie Goring  
Conservation Assistant

#### **Materials Used during October 15, 2019 Conservation Commission Meeting:**

Draft Minutes

46 Pine Point Road – Site Plans, photos, and supporting materials

Shepherd Memorial Woodlands Beaver Flow Control Device – Site Plans, photos, and supporting materials

166 North Shore Drive – Site Plans, photos, and supporting materials