

SUDBURY CONSERVATION COMMISSION
Minutes of the Meeting Held Monday, September 23, 2013

Present: Greg Topham, Chairman; Beth Armstrong; Vice-Chairman; Sharon Rizzo; Rob Elkind; Tom Friedlander; Debbie Dineen, Coordinator

WPA & Bylaw Notice of Intent (cont.): 27 Revolutionary Rd.; L. Sievers

Construction of 16' x 40' barn in outer riverfront area
(continuation requested until Oct 7, 2013)

WPA & Bylaw Notice of Resource Area Delineation: 338 North Road, Cavoto

(continuation requested until Oct 7, 2013)

Certificates of Compliance:

The Coordinator reported that the as-built plans have been received, she has conducted site visits for each, and all work has been done in accordance with the Orders of Conditions.

1. 586 Peakham Rd., Bond #301-

On a motion by G. Topham, 2nd by S. Rizzo, the Commission voted unanimously in favor of issuing the Certificate of Compliance

2. Raymond Rd.; Framingham Sewer Stream Restoration #301-1106

On a motion by G. Topham, 2nd by B. Armstrong, the Commission voted unanimously in favor of issuing the Certificate of Compliance

3. Lot 11 Kendra Drive #301-

On a motion by G. Topham, 2nd by S. Rizzo, the Commission voted unanimously in favor of issuing the Certificate of Compliance contingent on receipt of the signed Deed for the 37-Acre+- Blue Sky Trust property on Maynard Rd.; to be recorded on the issuance of the Order of Conditions permitting a single-family house lot on WR7 Willis Road.

Minutes

On a motion by G. Topham, 2nd by R. Elkind, the Commission voted unanimously in favor of approving the Minutes of **September 9, 2013** as drafted. S. Rizzo abstaining.

2013 Bowhunting Program Discussion

On a motion by G. Topham, 2nd by S. Rizzo, the Commission voted unanimously in favor of continuing the bow hunting program for the 2013 season.

NStar Substation Expansion: informal working meeting

Commissioners agreed to meet with NStar representatives with less than a quorum of Commissioners in a working session to discuss mitigation for the proposed substation expansion on Boston Post Road.

Comments to Planning Board: Livermore Estates Subdivision Maynard Rd.

The Commission reviewed the two-lot subdivision plan for comments for consideration by the Planning Board.

A note on the plan indicates that soil test pits in the areas of the proposed infiltration systems have not yet been done. The Commission suggests that this testing

be required prior to subdivision approval to show that the site can leach the required amount of runoff. This information will be required for the stormwater consultant review.

The plan shows a Proposed Open Space Easement within the Perimeter buffer. Is this intended to be public access to the Open Space area? The Commission suggests that with the steepness of the slopes and lack of parking, the Open Space area should not be open to the public. It could be held in a perpetuity conservation restriction or gifted to the Town for conservation purposes in accordance with MGL Chapter 40 s. 8C.

The Open Space and/or CR area could be expanded to include the area in the rear of the lots above elevation 226'. Future homeowners should be prevented from changing the contours on the hillside and creating a problem intercepting subsurface runoff such as at 340 Maynard Road.

The Town GIS maps indicate that a portion of these lots are already subject to a drain easement. This should be investigated to see if there are any conflicts.

The two catch basins in Maynard Road should be required to be upgraded with deep sumps and grease/gas traps, if necessary.

It appears that the underground infiltration system on Lot I will overtop in the 25-year storm and above. It is unclear in which storm event the rain garden overtops. Runoff peak rates and volumes will increase slightly in the 10 (volume) and 50 (peak rate) – storm events. This excess flow will enter the Town drainage system on Maynard through a direct piped connection. Sudbury's EPA permit requires the detection of illicit discharges to the town's stormwater system. Although not directly prohibited, any permitted tie-ins to this system provide an uncontrolled conduit for pollutants. In this case, the Town could become responsible for any paints, solvents, cleaners, grease, etc. which enters the system through a permitted discharge.

WPA & Bylaw Notice of Intent: 67 Brewster Rd.; Stan Hargus, DNH Homes

Violation: Alteration of stream due to inadequate site stabilization

Present: Stan Hargus; Ben Ewing; abutters; Fred King, SCC consultant

Mr. Ewing explained that work has continued on site per the Planning Board requirements. B & C Associates did not find the additional bordering vegetated wetland off the end of the cul-de-sac that was discovered by Fred King. They will have a site visit to look at this area.

Fred King reported his findings from his site visit and a review of all the documents in the file. He found that new silt deposits in the stream bed extended for a distance of 230' downstream from the culvert under Brewster Road. It is 1/2 " to 1 inch deep.

He found that there are site designs that need upgrading to best management practices; that there is the potential for blow-outs on the hillside that will require monitoring of the area due to the glacial till cover over hardpan. He explained that 90% of the runoff infiltrated will travel along the hardpan creating a sheer plane. Surface vegetation will not hold the soil in this area when it is saturated.

The erosion control was not installed per the requirements or manufacturer's instructions. The material that was used was too light of a material and will biodegrade within one year. No staples were installed to secure the erosion control and not all of it was in direct contact with the ground as required. Mr. King noted that the material was bridging the drainage swales and

hindering germination of the seed underneath. Erosion gullying was observed along the edge of the driveway and will continue to occur unless a berm is installed.

Mr. King continued by stating that slopes over 50' long and 20' high need something to break up the flow of runoff to prevent channeling. Planting of shrubs and trees will not provide enough coverage to divert the water on these slopes. The runoff swales need riprap and a geo-fabric installed.

The entire off-site watershed needed to be considered in the design of the swales and other drainage structures. The engineer of record had drawn the watershed at the property line. This will tell the "before & after" differences, however the offsite watershed needs to be taken into account. An old interceptor ditch picks up off site water as well.

An old fire protection easement, which is a conduit for runoff, should continue all the way to the cul-de-sac and be dealt with as part of the overall drainage plan. There is an 18" pipe in the cul-de-sac without an obvious outlet. B. Ewing stated that he was looking at the installation of a level spreader for the end of the runoff swale. F. King stated that a level spreader will not work on steep slopes and that they need to design a structure to bring the 25-year storm runoff all the way down the hill.

Mr. King continued by explaining that the rear yard retaining wall, sub-drains, & roof drains are all infiltrating the gravel till area at the top of the slope. The septic system is also infiltrating near the top of the slope but he did not see the septic leaching as a problem. He stated that the runoff infiltration was magnitudes of difference larger than the amount of effluent infiltrated from the septic system. He noted that a geo-fabric was installed down-gradient of the infiltration devices, however it is too short and the runoff will circumvent the barrier and breakout at discreet points on the slope. This area of super-saturated soils will cause a landslide. This area needs close monitoring.

Another problem area is the infiltration trench on the outside of the driveway is too close to the slope. Severe icing and the use of heavy sanding will result in sand & silt clogging the trench very quickly. The 5" berm shown on the plan has not been installed.

The 12" light-duty pipe used under the driveway entrance is not enough for the amount of flow it will received.

In other issues; the SWPPP is not on the EPA website, and the Landscape Plan has no labeling. The site will need deep-rooted plants and trees to the extent the forest is almost reconstructed in order to hold the slope. Grass will hold only the top 6" of soil.

Alan Corin, abutter, noted that in the latest rain event the driveway berm on his property was breached. Mr. King stated that is why the slope needs to be stabilized with tree and plants roots interlocking to hold the soil together. Mr. King replied that with the current design on site he has concerns for the slope not holding when the ground is saturated. He added that a catch basin at the bottom of the slope would be a good addition to maintain the hydrology of the area. He suggested checking the pipe with a camera to see if it is connected and functions as part of the hydrology of the area. Mr. Corin agreed that a big concern of his and other neighbors is a major mudslide.

The property owners on either side of the stream requested they be notified by the applicant when the stream restoration will occur.

On a motion by G. Topham, 2nd R. Elkind, the Commission voted unanimously in favor of requiring immediate cleaning of the stream for 230' ½ inch deep under the Notice of Violation.

The hearing was continued to Oct. 21, 2013 for the slope stabilization to give the applicant the opportunity to address Mr. King's concerns.

The meeting adjourned at approximately 9:15pm.