

**Hamilton Conservation Commission
Minutes of Meeting of September 11, 2013
Meeting held at Hamilton Town Hall**

Commissioners present:

Stacy Carpenter, Virginia Cookson, Bob Cronin, Keith Glidden, Richard Luongo (chair),
George Tarr.

Staff present:

Jim Hankin, Conservation Coordinator

Others present for a portion of the meeting:

Hamilton DPW, Dave Hanlon Director Applicant

Peter Richardson, Consultant from Green Technologies

Emily Sullivan, NEMCD

Laura Bugay and Dwight Dunk , CDM Smith Inc., Reps.

Richard Luongo opened the meeting at 7:30 p.m. Jim Hankin noted that the meeting was being recorded.

Mr. Hankin referred to the town-wide storm-water and drainage study, relative to culverts in the Howard and Linden Street area that was done by Earthtech in 1998.

Mr. Hankin also mentioned a copy of an Emergency Certification form relative to a dwelling structure at 4 Skinner Avenue in Asbury Grove where a sizeable tree fell on the roof rendering the building uninhabitable. He noted that a structural engineer has reported to Building Inspector Charles Brett that the building is not safe and Mr. Brett has condemned the building. Mr. Hankin said the building is in the buffer zone and he has issued a certification to have it demolished and removed. He added that any new construction or development at the site would need a Notice of Intent.

Mr. Hankin noted that he had distributed to the Hamilton Conservation Commission (HCC) the May 2013 Northeast Mosquito Control District (NEMCD) report on conditions in the Howard and Highland Street areas.

Notice of Intent (Public Hearing continued from May 8, June 13, July 17, 2013 and August 14, 2013)

Linden and Howard Street

Replace existing culverts under two public ways

Hamilton DPW, Dave Hanlon Director Applicant

Peter Richardson, consultant

The Commission Chair re-opened the public hearing. David Hanlon noted that a hydrologic assessment was done for the proposed Linden and Howard Street culvert replacements. He explained that WorldTech Engineering was dismissed due to its resources and Green International was retained.

Peter Richardson, representing the applicant, explained that his firm was contracted by the Town to study a series of three culverts related to planned improvements at Linden and Howard Streets. He said the culvert system that begins at Howard Street leading to Linden Street is a main tributary to Idlewood Brook that leads to the Ipswich River. The hydrology study determines how much water passes through the area.

Mr. Richardson explained in some detail the various levels of water flow in Linden, Howard and Highland Street areas. He referred for all the specific details on the hydrology assessments to an engineering memorandum which was distributed to HCC and is available from the HCC office. This analysis compares the 10-year, 25-year and 100-year storm flood elevation for each of the three areas and also compares the resulting flooding that would occur in each area when specific improvements are made.

Mr. Richardson described in detail what could be done to find a solution that would recreate the conditions at the Howard Street site when there were originally two 24-inch pipes. He also noted that there is a mature tree on a neighbor's property in the direct vicinity of the culvert piping and another tree that is contributing to clogging the one of the 24 inch pipes. The solution proposed is to abandon the existing culverts that have deteriorated and are full of silt and roots. A new pipe would run out to the side and around and prevent damage to a tree and the abandoned culverts would be filled and abandoned in place so this would not impact the stone headwall. One 30-inch pipe would restore the capacity of the culverts and not impact the mature tree that has grown over the old culvert and prevent the overtopping of 100-year flood on Howard Street.

Mr. Hanlon explained that the abutter had made it clear that the path of the existing twin culverts is between his driveway and tree. Therefore, any work done there would result in the Town having to replace his driveway and the tree would be killed. So the alternative that Mr. Richardson is proposing addresses the hydrologic study and what could be done to be the least invasive. He added that the Town would request a right of entry from the abutters to access and install the culvert fix. Once installed a measurement would be done from the centerline of the culvert so the Town could obtain a permanent easement by vote at Town Meeting.

Mr. Richardson mentioned that analysis of Linden Street and the reconstruction project where the plans were taken from WorldTech noted that the concrete pipe was submerged so it was not clear whether it was an 18-inch or 24-inch pipe. He explained this would be replaced with a 24-inch high-density polyethylene pipe in the same place which would restore capacity since the pipe is blocked up and partly submerged. This would prevent Linden Street from overtopping in a large flood if the pipe were functioning. The flow goes downhill.

Discussion ensued about how the blocked Howard Street culverts. Mr. Richardson reiterated that the existing culvert would be filled and new pipe installed avoiding the tree. He responded to members that the storm drains on the street would continue to drain to the headwall. He described how the polyethylene pipe is black plastic and will have a flared outlet end to blend into bank and stone would be used so there would be no erosion. He added that a 30-inch pipe would not clog like a 12-inch pipe and a manhole cover would be used for the Town to maintain the pipe.

He said detail on hay bale location would be provided as part of Order of Conditions. Mr. Richardson said removed material would be kept in a truck versus stockpiled in the buffer zone. Mr. Hankin said HCC does not have many public works projects of this scope coming before them. Mr. Richardson reiterated that site inspection would occur before work starts and location of erosion controls would be verified. He explained that the work is expected to be done just

above water main. Discussion ensued about proposed use of appropriate fill material (watered down concrete) that fills in void spaces in pipes. Mr. Hanlon explained that if work would have to be done on these pipes in the future the fill material could be removed easily with an excavator. Mr. Richardson said both existing pipes would be filled and ends blocked with bulkhead.

Keith Glidden moved to close the public hearing. Stacy Carpenter seconded the motion. The Commission voted unanimously in favor of the motion.

Discussion: Emily Sullivan of NEMCD to attend and discuss NEMCD spring 2013 report on Howard and Highland Street.

Ms. Sullivan referred to NEMCD spring 2013 report on investigation of the area for mosquitoes and flooding particularly between Howard and Highland Streets. She noted there is a lot of vegetation and fallen trees in Red Maple swamp behind Howard Street that is very soft with a deep channel and blockages along the way. The NEMCD crew cleared this area by hand to help the water move through. She added that there had been discussion about NEMCD bringing in low- pressure ground equipment to do the clearing work. Ms. Sullivan noted that the water remains high in the channel and mentioned that water mesh was used at the upstream end of the Highland Street culvert to keep animals out but it collects leaves, sticks and debris. Once the water is slowed down then the sediment falls down so allowing the water to move through at the regular velocity is better.

Ms. Sullivan mentioned the perspective from the Highland Street headwall looking downstream and said the sediment (coarse road sand) below Highland Street is blocking the flow out of the outlet at Highland. Her crew recorded basic elevations and determined there is a huge sediment backup from the Highland Street culvert. She thought the public works department cleaned that out in the past, prior to wetlands regulations.

Ms. Sullivan said in order for the system to flow properly from Howard Street to Highland Street the sediment blockage would have to be removed from the Highland Street outfall. After the system flows a bit then the water would be lowered and the wetland would firm up. In a year's time she expects the blockages in upper system could be analyzed. She said NEMCD proposes removing the 400 feet of sediment to approximately one foot depth to re-establish the previously existing conditions, which would allow the pipe to function as designed. Ms. Sullivan summarized that customized low-pressure equipment (1.7 pounds per square inch) such as excavator and dump crawler could be used to remove material. Work would occur in the wetland. She said excavated material is completely removed from the wetlands site and placed to the roadside. The spoils are then removed by municipality. The project cost would address spoils otherwise scope of work would be covered under the Town's annual NEMCD assessment.

In response to Mr. Hankin, Ms. Sullivan said this would be an approach to the mosquito problem upstream. She said originally NEMCD was called in for flooding problems and mosquito sampling was done in ditch between Highland and Howard Streets. She noted that Red Maple swamp will produce mosquitoes. Ms. Sullivan said the ditch is stagnant so if the water is allowed to move then this would reduce mosquitoes. She added that flooding produces mosquito problems in most cases.

Ms. Sullivan reiterated that excavating would occur from Highland Street to down below to allow the pipe to work correctly and she did not witness this type of sand sediment in Howard Street area. She noted that Howard Street is flatter and there is not nearly as much traffic.

MS. Sullivan explained if the Town decides to move forward, she would develop a more formal scope of work that the Commission could review and provide comments as well as to other regulatory organizations such as DEP and Army Corps of Engineers. Discussion ensued about whether or not Natural Heritage has issues but they did not as recently as 2000.

Mr. Hanlon said that early November is the expected time for the culvert repair/installation to be completed. Ms. Sullivan suggested the timeline NEMCD is looking at is in the winter when the work is typically done. She reiterated that the formal narrative would be done and provided to the Town, DEP and Army Corps of Engineers (how to file is important relative to jurisdiction from these agencies). She noted that other organizations likely would not be involved.

Ms. Sullivan said from talking to neighbors in the area, it was historically maintained. If this is prior to the Wetlands Protection Act and can be established to regulatory standards then the proposed ongoing work in the area would be considered a maintenance exemption and may not need much review and could be done this winter. Discussion addressed if the work was done this winter Ms. Sullivan would review area in spring and fall to determine next steps. She said her scope of work for the currently proposed project would be completed within a month. The Commission agreed that Ms. Sullivan should go ahead with her work.

Keith Glidden moved to issue an Order of Conditions for the NOI and approval of the culvert project with Special Condition to have a plan identifying any hay bales and silt control, location of stockpiling be identified, description of procedure for storing overnight (i.e., trucks and tarps), and identify of location for storage of heavy equipment outside of the buffer zone as well as a pre-construction site visit, and OOC would not take effect until written information requested is provided. Also discussed was that an As-Built plan would be required. Mr. Hankin noted that DEP received NOI and had no comment. Ms. Carpenter seconded the motion. The Commission voted unanimously in favor of the motion.

Notice of Intent

Hamilton Landfill

Close and cap landfill

Hamilton DPW, Dave Hanlon Director Applicant; CDM Smith Inc., Reps. Laura Bugay and Dwight Dunk wetlands consultant.

Mr. Luongo opened the public hearing. Laura Bugay, representing the applicant, noted the site plan for the closure of the landfill site as mandated by DEP. She added that the landfill is located to the east of Chebacco Road and described features at the site such as the public works waste area, Marsh Rats gun club and Gravelly Pond. She outlined the wetlands including BVW and certified vernal pool, also the 400 foot protection zone for Gravelly Pond, the intermittent stream and pond.

Discussion ensued about how the site is not a residential lot and the Conservation Commission had voted to change regulation in 2007 to establish a 50 foot No Disturb Zone and 75 foot No Build on a non-residential site and where there are non-developed lots. Ms. Bugay said there is flood plain in the area that cuts through on both sides of the landfill and there is no elevation associated with it but corresponds, roughly, with 64 elevation to the north and elevation 62 to the south. These elevations also roughly correspond to the wetlands delineation.

Ms. Bugay mentioned that Area 1 is the large mound near the landfill entrance that was capped in the 1980s. The closure was done by the Town and this was approved by DEP at that time. Since

then regulations for landfill closure have become more stringent and some areas are now deficient. DEP is requiring soil to be added to reach 2' cap standard.

Test pits were done at the site as part of the compressive site assessment by SEA engineering firm to confirm the 1980's cap. It was verified that the cap is good around the edges and within any jurisdictional areas so it does not have to be augmented. Only woody vegetation and trees have to be removed in this area because the root system creates a pathway for stormwater to get through the cap into the waste below and into the groundwater.

Also in Area 1, the location where public works personnel now store brush and yard waste would be paved. DEP has requested two to three feet of capping soil be located below the pavement cap. In addition, there would be a storm water basin to meet storm water standards for the added pavement in the front. The paving storm water BMP are all outside HCC jurisdiction.

Ms. Bugay said the some waste would be relocated from Area 2B to Area 2. This would provide additional space off of the landfill footprint for post-closure use (i.e., anaerobic digester). Area 2B would not have any waste. She added that samples would be taken in the bottom of the excavation to prove DEP information about waste and impacted soils. Mr. Hankin clarified that the DEP division that focuses on wetlands is reviewing the wetlands filing and Ms. Bugay, up to this point, has only been communicating with DEP's solid waste division.

Ms. Bugay spoke to the 3' soil cap that would occur in the location of the Marsh Rats gun club where tree removal would occur in order to install the cap. She mentioned that Area 2 is where the most work would occur and waste would be pulled back from the wetlands and a 5' buffer area would be installed. Subsequently this location would be used to create a path in undisturbed area that would be grassed located between cap and wetlands and installed for DEP inspectional reasons. DEP will inspect the cap on an annual basis to ensure the cap is functioning correctly. Ms. Bugay said wetlands would not be filled. She said the access road would be maintained. She added that the Rod and Gun Club would stay on the site.

Discussion ensued about the adjacent pond and how work would occur fairly far away from it. Virginia Cookson noted that there are two, uncertified vernal pools on the site. Ms. Bugay referred to National Heritage and Area 1 where review is occurring for blue-spotted salamander but comments have not been received yet from the organization. She noted that there is impact to land that is subject to flooding along Area 2 and this is where the waste would be excavated and located back. A temporary alteration is required to do the work but there will be a gain to the flood storage area.

Ms. Bugay said the plan shows erosion control barrier lines. Erosion control also serves as the limit of work.

Ms. Bugay said there are no indications that there are drums of waste on the site. Also, the potential vernal pool and pond were apparently dug in the 1950s and 1960s to provide material to cap the landfill at that time. She suggested that there would probably be one excavator, a bulldozer, and trucks to move around material on site.

Ms. Bugay said tree removal and waste relocation would be done in the winter and based on the response from National Heritage work near vernal pool would be done off season (i.e., not early spring). Discussion ensued about extent of pavement and gravel road. The road would stay in the same place but increase in grade. Ms. Bugay said the entire portion of Area 1 has to be capped.

Discussion ensued about how the grades for Area 1 currently have a highest elevation (i.e., 98) so the mound would be higher by 2' to 4'. She added that plateau work would be out of jurisdiction.

Discussion addressed how there is going to be a lot of tree removal and tree mulch would go off site.

Mr. Hankin mentioned that the application calls for waivers from the bylaw from the No Disturb and No Build Zone. He said the Commission would look at mitigation relative to negative impact. Discussion ensued about how there is Phragmites at the site and there could be eradication written into the Order of Conditions. Mr. Hankin listed the limited project requirements under WPA regulations. He suggested the public hearing be kept open until the Commission receives documentation from National Heritage and a comment, if any, from DEP Wetlands Division.

Dwight Dunk, a wetlands consultant hired by CDM, explained that when the waste is pulled back and work is done on the upland edge and mound, if more work goes beyond into the wetland, the wetland would be restored to existing grade and seeded with wetland seed mix. Also, National Heritage is going to review the project within a 30 day time period. Mr. Hankin said DEP is still reviewing the filing and suggested the Commission wait to get the agency's results. He added that at a later hearing the Commission should condition the project based on DEP replication guidelines.

Ms. Bugay explained that when test pits were done along the wetland edge, a clay liner was identified at the bottom of the landfill mound. It is also at the edge of the waste and work is anticipated at the edge of wetland but waste is not expected there. She noted if anything is found, Mr. Hankin would be contacted and it is standard practice to restore in place. Discussion ensued about Mr. Hankin visiting the site pre-construction and after vegetation is cleared. Also addressed is that the clay barrier could potentially be brought back when waste is brought back so that grass pathway can be seeded and sustainable.

Ms. Bugay suggested the Commission send her a list of conditions to review by the next Commission meeting and she noted that the only specification expected from National Heritage would be time of year for work to occur and she thought DEP would be amenable to the landfill project relative to its comments.

Mr. Glidden moved to continue the public hearing until the Commission's September 25, 2013 hearing. Ms. Carpenter seconded the motion. The Commission voted unanimously in favor of the motion.

Request for Determination of Applicability

103 Cutler Rd.

Morten Jurgensen applicant

Construct addition to existing dwelling; 80+ ' EOW

Mr. Glidden recused himself as an abutter. Morten Jurgensen said he is adding a bedroom to his house as part of one-story addition. Also proposed is a new outdoor stairs and three-season porch that would be sited on Sonotubes. The project would take place in buffer zone. The Commission reviewed photos of the house recently taken by the Coordinator. Mr. Hankin noted that Septic Designer Dan Johnson had defined the wetland line from a few years ago. The photographs show the wetland line.

Ms. Carpenter moved to issue a Negative Determination. Ms. Cookson seconded the motion. The Commission voted unanimously in favor of the motion.

Request for Determination of Applicability

120 Miles River Rd.

David and Jennifer Flynn Owners, DB Johnson rep.

Upgrade an existing septic system; all work outside jurisdiction except grading

Mr. Hankin explained that grading was in the buffer zone and all other components of new septic system are outside of the buffer zone. Discussion ensued about how Mr. Hankin had notified the Flynns that they did not have to attend the Commission meeting since this was a straight forward septic system upgrade. Mr. Hankin had visited the site and said the RDA was related to the grading at the site and described where the new septic system would be located. The existing septic system would be abandoned and the new system is higher than the groundwater. The system will be built into the existing grade so the mounding would not be very visible at the site. Mr. Hankin noted that the yard was flat and there is well-established lawn. The property owners want to begin the project as soon as possible.

Mr. Glidden moved to make a Negative Determination. Ms. Carpenter seconded the motion. The Commission voted unanimously in favor of the motion.

Emergency Certification

4 Skinner Ave (Asbury Grove)

Demolition of existing condemned structure, no construction permitted.

HCC to consider ratification of Emergency Certification.

Mr. Hankin said a big tree hit the roof causing the building to become uninhabitable at 4 Skinner Avenue. He explained that Building Inspector Charlie Brett had said that there is a public safety issue with this building and he condemned it. Mr. Hankin then issued an Emergency Certification which allows the building to be demolished in the buffer zone. If there is any new construction on the site, the building will have to go through the NOI process. He showed the Commission photos of the tree where it went through the top of the building and noted that he was notified by Asbury Grove that there is no intention to rebuild. Bob Cronin said once a house is gone in the Grove there is no rebuilding.

Discussion ensued about how there is just crawl space in houses at the Grove rather than basements so the entire structure would be demolished to grade. Mr. Hankin noted that one of the Special Conditions is that he is to be contacted as soon as work is completed for an inspection so he can order any remedial action required that the applicant will have to perform.

Mr. Glidden moved to ratify the Emergency Certification issued by Mr. Hankin. Ms. Carpenter seconded the motion. The Commission voted unanimously in favor of the motion.

Acceptance of minutes from the last Commission meeting (August 8, 2013).

Mr. Glidden moved to accept the minutes from the last Commission meeting. George Tarr seconded the motion. The Commission voted unanimously in favor of the motion.

Mr. Cronin moved to adjourn. Ms. Carpenter seconded the motion. The Commission voted unanimously in favor of the motion. Commission adjourned at 9:20 pm.

Minutes submitted September 16, 2013 by Jane Dooley