

TOWN OF HIGHGATE

Planning Commission

Minutes

February 18, 2014

I. CALL TO ORDER

David Cadieux called the meeting to order at 6:05pm.

Present at meeting:

- **Planning Commission Members:** David Cadieux, Woody Rouse, Rick Trombley, Julie Rice and Luc Dupuis
- **Staff:** Heidi Britch-Valenta – Planning and Zoning Administrator, and Samantha Rice – Planning and Zoning Secretary
- **Public:** Amanda Holland and Michelle Phieffer

II. OTHER BUSINESS

A. Northwest Regional Planning Commission – Low Impact Development and Stormwater Management

Mrs. Holland began by explaining to the Board the difference between the natural water cycle and the water cycle after urbanization has been introduced to the area. The natural water cycle begins when condensation comes down as rain and then is infiltrated by the soil which then goes back into our streams, rivers and lakes at that point there is evaporation allowing the water to go back into our atmosphere. The natural water cycle demonstrates the maximum amount of water going into the ground. In contrast, when you look at our highly developed areas there is a decrease of infiltration due to the runoff caused by roads, roofs, and driveways. This then creates problems like erosion and increases the probability for dry periods. For smaller communities like Highgate, they fall in-between the natural and urban water cycle with little impervious surfaces. As you increase the amount of impervious surface in the water shed area, run off can also increase as high as 55% and you have a lot less ground water recharge and less water going into the ground.

The history of stormwater management begins when society first started building roads they would put the runoff in ditches on the side of the road. But soon scientists realized that ditches have caused a lot of water pollution, erosion and flooding in

streams and rivers. Now with the evolution of stormwater management scientists are moving more towards looking at the ecology of the site and a watershed approach. This kind of approach includes more pervious surfaces, more trees, and more grassy areas.

The state has now included stormwater permits for residential and commercial development and addresses developments that have more than 1 acre of impervious surfaces. Anything that is less than 1 acre of impervious surface isn't addressed by the State. At this point Amanda suggested that if the Town of Highgate doesn't have something in place for areas developed with less than 1 acre then the Board should include an additional bylaw in order to address the use of stormwater management. Impervious surfaces would include buildings, driveways, gravel surfaces, roofs, parking lots etc. The Planning Commission decided that there should be storm water management on any size lot and believes that there should be a plan for a 1-acre lot and then if there is more than 1-acre there should be something else put in place.

When looking at the stormwater standards the two major subjects that need to be addressed are overbank flood protection and channel protection. The reason for these two standards being so important is that the subdivision regulations now state that developers need to address the 2-year and 10-year storm plans. A 2-year plan is for a storm that would happen on average every 2 years. A 10 year plan is for a storm that happens on average every 10 years. These two plans relate back to overbank flood protection and channel protection.

A storm might happen in a non-developed area and stream discharge is low. After development is created in the area there are more impervious surfaces and larger amounts of water sitting for a short period of time causing flash flooding. Although there is nothing wrong with using traditional stormwater methods it tends to cause the area to hold a lot of water and then have a high level of water for a longer period of time still causing floods.

During traditional stormwater management the rain comes down and hits the roof, hits your lawn and is pushed towards a storm drain and ends up in the local streams and rivers. Traditional stormwater management in an urban area is pipes pushing water off the site. The resulting negatives of traditional stormwater management are sedimentation and erosion, nutrient loading, bacteria, trace metals, trash and debris, chlorides, reduction in base flow and increased runoff volumes for a longer duration.

In order to address these resulting negatives the State now suggests using low impact development to minimize total disturbance on the site. The main themes of low impact development are conservation development through easements, minimize soil compaction to allow infiltration, reduce impervious services, protect the natural flow

patterns and buffers, protect sensitive areas like wetlands and disconnect storm water. Disconnecting storm water is done when you allow rooftop run-off to flow into your yard instead of into a pipe or the street. Low impact development could be described as developments required to be designed in a manner that is respectful of its natural features, advocating for conservation development or clustering which also reduces construction cost and creating a vegetative buffer system in order to reduce the speed of the water leaving the site and improve the water quality. Low impact development subdivision was found to reduce runoff by 42% while traditional stormwater management subdivision increased runoff by 155%

In order to relate the need for better stormwater management to the changing Highgate Bylaws the Planning commission would need to provide Bylaws that incorporate buffers around rivers, streams, lakes and wetlands, reduce pavement and impermeable surfaces, encourage infiltration of storm water rather than allowing runoff, and maintain as much natural vegetation as possible. The Highgate bylaws already include clustering PUDs, provisions on open land to ensure land preservation, provisions to preserve trees and water courses, requirements to avoid steep slopes and shared parking by businesses which reduces overall impervious spaces.

In terms of setting appropriate conditions for future developers in Highgate, those conditions could include landscaping that provides a buffer between water ways and development, stormwater treatment practices that encourages infiltration, parking lot landscaping that reduces runoff, a stormwater management plan, appropriate snow storage, appropriate trash storage and requirements for the number and size of trees planted.

Mrs. Holland suggested that the two things the Board should consider are looking more thoroughly at the site plan or design of the proposed subdivision and addressing the stormwater quality in the area. The board should also consider what kind of information the applicant is bringing to the Board so that the Board has a better understanding of what is going on at that particular site and the impacts that would be made from that proposal. In the Bylaws for site plan approval the Bylaws mention that the applicant should include existing conditions but the Bylaws don't include all the necessary things that would allow an evaluation of the impact on stormwater management. One of the suggestions Mrs. Holland had to improve this section was to consider expanding that list to show natural resources and constraints on the site prior to development. Specifically the Bylaws say the applicant should include contours on their site maps. Mrs. Holland recommends including vegetation and natural features to the Bylaws; to be more specific the Bylaws could also include specificity of soil types, wetland locations and sensitive natural communities. The Board agreed with Mrs. Holland that all site plans submitted should be done by a professional engineer in order to add specificity to the site plan application.

Currently in the Bylaws it is only a recommendation to avoid steep slopes but the Selectboard would like more regulation for steep slopes and the Planning Commission agrees with this suggestion. Right now the Planning Commission does enforce control on 20% slopes but no there are no regulations. The only requirement is Conditional Use review.

The language the Bylaws use now have quantity therefore Mrs. Holland suggested that using more specificity would give the bylaws quantity and quality. Instead of using the word "adequate" which is in place now in the bylaws, you can use some of the more dense details provided by Mrs. Holland to express what the town wants from the applicant. The Board would like to add this language and remove the word adequate. The Board doesn't want to dictate what the engineers need to bring forth but rather have them bring what they feel appropriate and then let the Board approve it. Essentially they want to regulate results, not methods. The Bylaws could also incorporate specific language that addresses preserving open space and maintaining existing vegetation. At this time the only place these two things are mentioned is in the Planned Unit Development and that forestry and agricultural areas need to be preserved by limiting the disturbances on a site. The planning Commission would like to define open space so that roadways are not included as open space.

III. DELIBERATIVE SESSION

MOTION: Mr. Trombley motioned to approve January 6th minutes with correction. Mrs. Rice seconded the motion. Motion carried unanimously

MOTION: Mr. Trombley motioned to approve minutes for January 14th as corrected. Mr. Cadieux seconded the motion. Motion carried unanimously.

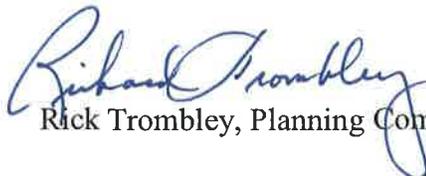
IV. ADJOURNMENT

Mr. Cadieux made the motion to adjourn the meeting. Mr. Rouse seconded the motion. Motion carried at 8:30pm.

Respectfully submitted,

Samantha Rice, Planning & Zoning Clerk

Minutes approved by:


Rick Trombley, Planning Commission Chair

6.17.2014
Date: